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Administration

Petroleum Supply Monthly

with data for October 2019

December 2019



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Preface

The Petroleum Supply Monthly (PSM) is the monthly component of a series of three publications produced by the Office of Petroleum and Biofuels Statistics of the U.S. Energy Information Administration (EIA). The other two components are the Weekly Petroleum Status Report (WPSR) and the Petroleum Supply Annual (PSA). Together these publications present comprehensive petroleum and biofuel supply data on a weekly, monthly and annual basis.

Data presented in the PSM describe the supply and disposition of petroleum products in the United States and major U.S. geographic regions. The data series describe production, imports and exports, inter-Petroleum Administration for Defense (PAD) District movements, and inventories by the primary suppliers of petroleum products in the United States (50 States and the District of Columbia). The reporting universe includes those petroleum sectors in primary supply. Included are: petroleum refiners, motor gasoline blenders, oxygenate producers, operators of natural gas processing plants and fractionators, inter-PAD District transporters, importers, and major inventory holders of crude oil, petroleum products, and biofuels. When aggregated, the data reported by these sectors approximately represent the consumption of petroleum products in the United States.

Scope of data

The PSM presents statistics for the most current month available as well as year-to-date. In most cases, the statistics are presented for several geographic areas - - the United States (50 States and the District of Columbia), five PAD Districts, and 12 Refining Districts. At the U.S. and PAD District levels, the total volume and the daily rate of activities are presented. The statistics are developed from monthly survey forms submitted by respondents to the EIA and from data provided from other sources including federal and state agencies.

Sections

- U.S. supply and disposition of crude oil, petroleum products, and biofuels
- Regional supply and disposition of crude oil, petroleum products, and biofuels
- Crude oil supply and disposition and production by state
- Natural Gas Processing
- Refinery Operations
- Imports of residual fuel oil by state of entry
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- Imports by country of origin
- Exports
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- Stocks
- Movements of crude oil, petroleum products, and biofuels

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Table 1. U.S. Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, October 2019
(Thousand Barrels)

Commodity	Supply					Disposition				Ending Stocks
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports	Adjustments ¹	Stock Change ²	Refinery and Blender Net Inputs	Exports	Products Supplied ³	
Crude Oil⁴	392,305	--	--	193,544	19,237	14,113	486,107	104,866	0	1,085,387
Hydrocarbon Gas Liquids	155,676	-640	12,691	5,967	--	-9,959	22,052	63,691	97,910	257,139
Natural Gas Liquids	155,676	-640	4,302	5,353	--	-10,941	22,052	63,691	89,889	247,710
Ethane	58,093	--	113	--	--	2,228	--	9,721	46,257	59,606
Propane	51,648	--	7,805	3,396	--	-929	--	36,401	27,377	94,660
Normal Butane	14,164	--	-3,077	1,661	--	-11,795	9,068	10,597	4,878	61,515
Isobutane	13,464	--	-539	292	--	30	6,768	188	6,231	11,124
Natural Gasoline	18,307	-640	--	4	--	-475	6,216	6,784	5,146	20,805
Refinery Olefins	--	--	8,389	614	--	982	--	--	8,021	9,429
Ethylene	--	--	16	--	--	0	--	--	16	0
Propylene	--	--	8,708	479	--	-303	--	--	9,490	6,664
Normal Butylene	--	--	-308	135	--	1,311	--	--	-1,484	2,765
Isobutylene	--	--	-27	--	--	-26	--	--	-1	0
Other Liquids	--	37,155	--	43,799	8,182	-2,226	72,903	13,641	4,818	328,598
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	37,160	--	1,703	1,700	-810	36,853	4,520	0	28,870
Hydrogen	--	--	--	--	6,073	--	6,073	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	2,783	--	159	-1,124	145	--	1,673	0	1,465
Renewable Fuels (including Fuel Ethanol)	--	34,377	--	1,532	-3,262	-962	30,762	2,847	0	27,383
Fuel Ethanol ⁵	--	30,941	--	522	-817	-1,252	29,209	2,689	0	21,784
Renewable Fuels Except Fuel Ethanol	--	3,436	--	1,010	-2,445	290	1,553	158	0	5,599
Other Hydrocarbons	--	--	--	12	13	7	18	--	0	22
Unfinished Oils	--	--	--	23,632	--	6,134	6,110	6,516	4,872	98,347
Motor Gasoline Blend.Comp. (MGBG) ⁵	--	-5	--	18,464	6,482	-7,555	29,891	2,605	0	201,332
Reformulated	--	-1	--	8,905	9,172	1,689	16,363	24	0	47,136
Conventional	--	-4	--	9,559	-2,690	-9,244	13,528	2,581	0	154,196
Aviation Gasoline Blend. Comp.	--	--	--	--	--	5	49	--	-54	49
Finished Petroleum Products	--	141	600,143	22,656	-3,509	-17,598	--	95,836	541,193	262,573
Finished Motor Gasoline	--	141	317,869	3,547	-5,665	323	--	26,128	289,441	23,320
Reformulated	--	--	100,843	--	-9,105	-9	--	--	91,747	40
Conventional	--	141	217,026	3,547	3,440	332	--	26,128	197,694	23,280
Finished Aviation Gasoline	--	--	410	34	--	0	--	--	444	895
Kerosene-Type Jet Fuel	--	--	51,255	4,594	--	-4,539	--	6,882	53,506	39,819
Kerosene	--	--	503	287	--	501	--	216	73	2,534
Distillate Fuel Oil ⁵	--	--	148,575	5,503	2,156	-11,621	--	36,959	130,897	120,110
15 ppm sulfur and under	--	--	138,366	5,472	2,156	-12,298	--	28,010	130,282	104,443
Greater than 15 ppm to 500 ppm sulfur	--	--	3,968	6	--	-319	--	3,993	300	4,046
Greater than 500 ppm sulfur	--	--	6,241	25	--	996	--	4,955	315	11,621
Residual Fuel Oil ⁶	--	--	10,538	3,593	--	-334	--	4,536	9,929	29,562
Less than 0.31 percent sulfur	--	--	1,594	--	--	-10	--	NA	NA	3,446
0.31 to 1.00 percent sulfur	--	--	1,255	1,639	--	-608	--	NA	NA	4,024
Greater than 1.00 percent sulfur	--	--	7,689	1,954	--	287	--	NA	NA	22,086
Petrochemical Feedstocks	--	--	7,703	335	--	113	--	--	7,925	3,219
Naphtha for Petro. Feed. Use	--	--	4,084	280	--	44	--	--	4,320	2,226
Other Oils for Petro. Feed. Use	--	--	3,619	55	--	69	--	--	3,605	993
Special Naphthas	--	--	997	538	--	-146	--	--	1,681	1,073
Lubricants	--	--	5,297	2,318	--	893	--	2,691	4,031	12,342
Waxes	--	--	141	189	--	37	--	141	152	702
Petroleum Coke	--	--	24,956	250	--	201	--	17,430	7,575	8,758
Marketable	--	--	18,168	250	--	201	--	17,430	787	8,758
Catalyst	--	--	6,788	--	--	--	--	--	6,788	--
Asphalt and Road Oil	--	--	10,082	1,467	--	-2,990	--	763	13,776	19,615
Still Gas	--	--	19,318	--	--	--	--	--	19,318	--
Miscellaneous Products	--	--	2,499	1	--	-36	--	90	2,446	624
Total	547,981	36,656	612,834	265,966	23,910	-15,670	581,062	278,034	643,921	1,933,697

-- = Not Applicable.

NA = No Data Reported.

NA = Not Available.

¹ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).
³ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁴ Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

⁵ Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.
Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, the U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates.

Table 2. U.S. Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 2019
(Thousand Barrels)

Commodity	Supply					Disposition				Ending Stocks
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports	Adjustments ¹	Stock Change ²	Refinery and Blender Net Inputs	Exports	Products Supplied ³	
Crude Oil⁴	3,681,192	--	--	2,093,929	131,988	-5,546	5,030,265	882,390	0	1,085,387
Hydrocarbon Gas Liquids	1,453,498	-6,207	202,394	61,805	--	68,622	163,961	542,429	936,478	257,139
Natural Gas Liquids	1,453,498	-6,207	117,871	55,465	--	67,349	163,961	542,429	846,888	247,710
Ethane	554,037	--	1,507	--	--	9,966	--	84,045	461,533	59,606
Propane	476,355	--	86,482	39,090	--	31,002	--	322,647	248,278	94,660
Normal Butane	128,488	--	33,574	12,284	--	23,780	47,099	85,206	18,261	61,515
Isobutane	126,529	--	-3,692	4,043	--	2,634	66,002	1,612	56,632	11,124
Natural Gasoline	168,089	-6,207	--	48	--	-33	50,860	48,918	62,185	20,805
Refinery Olefins	--	--	84,523	6,340	--	1,273	--	--	89,590	9,429
Ethylene	--	--	100	--	--	0	--	--	100	0
Propylene	--	--	85,704	4,620	--	-282	--	--	90,606	6,664
Normal Butylene	--	--	-1,224	1,690	--	1,690	--	--	-1,224	2,765
Isobutylene	--	--	-57	30	--	-135	--	--	108	0
Other Liquids	--	371,235	--	422,785	61,166	-9,207	702,068	148,680	13,645	328,598
Hydrogen/Oxygenates/Renewables/	--	--	--	--	--	-2,506	--	--	--	--
Other Hydrocarbons	--	371,279	--	13,161	28,584	-2,506	363,540	51,990	0	28,870
Hydrogen	--	--	--	--	63,538	--	63,538	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	25,426	--	1,025	-6,212	-86	30	20,295	0	1,465
Renewable Fuels (including Fuel Ethanol)	--	345,853	--	12,097	-29,006	-2,421	299,670	31,695	0	27,383
Fuel Ethanol ⁵	--	310,996	--	3,986	-5,661	-1,554	281,752	29,123	0	21,784
Renewable Fuels Except Fuel Ethanol	--	34,857	--	8,111	-23,345	-867	17,918	2,572	0	5,599
Other Hydrocarbons	--	--	--	39	264	1	302	--	0	22
Unfinished Oils	--	--	--	191,190	--	12,491	95,685	69,217	13,797	98,347
Motor Gasoline Blend.Comp. (MGBG) ⁵	--	-44	--	218,434	32,582	-19,210	242,709	27,473	0	201,332
Reformulated	--	-4	--	56,887	66,103	-2,965	125,764	187	0	47,136
Conventional	--	-40	--	161,547	-33,521	-16,245	116,945	27,286	0	154,196
Aviation Gasoline Blend. Comp.	--	--	--	--	--	18	134	--	-152	49
Finished Petroleum Products	--	1,259	6,017,159	215,922	-5,512	-31,716	--	988,904	5,271,641	262,573
Finished Motor Gasoline	--	1,259	3,066,275	25,094	-26,921	-2,412	--	236,387	2,831,732	23,320
Reformulated	--	--	984,841	--	-63,622	-4	--	--	921,223	40
Conventional	--	1,259	2,081,434	25,094	36,701	-2,408	--	236,387	1,910,509	23,280
Finished Aviation Gasoline	--	--	3,708	292	--	-61	--	--	4,061	895
Kerosene-Type Jet Fuel	--	--	542,121	50,675	--	-1,767	--	66,030	528,533	39,819
Kerosene	--	--	2,276	388	--	-61	--	992	1,733	2,534
Distillate Fuel Oil ⁵	--	--	1,553,178	55,658	21,409	-19,896	--	406,580	1,243,562	120,110
15 ppm sulfur and under	--	--	1,453,227	51,706	21,409	-19,153	--	324,414	1,221,081	104,443
Greater than 15 ppm to 500 ppm sulfur	--	--	38,543	651	--	-1,065	--	37,000	3,259	4,046
Greater than 500 ppm sulfur	--	--	61,408	3,301	--	322	--	45,165	19,222	11,621
Residual Fuel Oil ⁶	--	--	114,578	42,757	--	1,248	--	71,388	84,699	29,562
Less than 0.31 percent sulfur	--	--	16,990	3,814	--	1,301	--	NA	NA	3,446
0.31 to 1.00 percent sulfur	--	--	15,077	6,717	--	-693	--	NA	NA	4,024
Greater than 1.00 percent sulfur	--	--	82,511	32,226	--	640	--	NA	NA	22,086
Petrochemical Feedstocks	--	--	90,343	4,994	--	-185	--	--	95,522	3,219
Naphtha for Petro. Feed. Use	--	--	58,372	4,120	--	-168	--	--	62,660	2,226
Other Oils for Petro. Feed. Use	--	--	31,971	874	--	-17	--	--	32,862	993
Special Naphthas	--	--	9,533	5,022	--	-388	--	--	14,943	1,073
Lubricants	--	--	50,742	14,400	--	-1,613	--	32,337	34,418	12,342
Waxes	--	--	1,369	1,554	--	26	--	1,223	1,674	702
Petroleum Coke	--	--	255,316	1,961	--	859	--	165,530	90,888	8,758
Marketable	--	--	188,673	1,961	--	859	--	165,530	24,245	8,758
Catalyst	--	--	66,643	--	--	--	--	--	66,643	--
Asphalt and Road Oil	--	--	99,607	13,117	--	-7,430	--	7,913	112,241	19,615
Still Gas	--	--	202,049	--	--	--	--	--	202,049	--
Miscellaneous Products	--	--	26,064	10	--	-36	--	525	25,585	624
Total	5,134,690	366,287	6,219,553	2,794,441	187,642	22,153	5,896,294	2,562,402	6,221,764	1,933,697

-- = Not Applicable.

NA = No Data Reported.

NA = Not Available.

¹ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁴ Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

⁵ Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, the U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates.

Table 3. U.S. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 2019
(Thousand Barrels per Day)

Commodity	Supply					Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports	Adjustments ¹	Stock Change ²	Refinery and Blender Net Inputs	Exports	Products Supplied ³
Crude Oil⁴	12,655	--	--	6,243	621	455	15,681	3,383	0
Hydrocarbon Gas Liquids	5,022	-21	409	192	--	-321	711	2,055	3,158
Natural Gas Liquids	5,022	-21	139	173	--	-353	711	2,055	2,900
Ethane	1,874	--	4	--	--	72	--	314	1,492
Propane	1,666	--	252	110	--	-30	--	1,174	883
Normal Butane	457	--	-99	54	--	-380	293	342	157
Isobutane	434	--	-17	9	--	1	218	6	201
Natural Gasoline	591	-21	--	0	--	-15	201	219	166
Refinery Olefins	--	--	271	20	--	32	--	--	259
Ethylene	--	--	1	--	--	0	--	--	1
Propylene	--	--	281	15	--	-10	--	--	306
Normal Butylene	--	--	-10	4	--	42	--	--	-48
Isobutylene	--	--	-1	--	--	-1	--	--	0
Other Liquids	--	1,199	--	1,413	264	-72	2,352	440	155
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	1,199	--	55	55	-26	1,189	146	0
Hydrogen	--	--	--	--	196	--	196	--	0
Oxygenates (excluding Fuel Ethanol)	--	90	--	5	-36	5	--	54	0
Renewable Fuels (including Fuel Ethanol)	--	1,109	--	49	-105	-31	992	92	0
Fuel Ethanol ⁵	--	998	--	17	-26	-40	942	87	0
Renewable Fuels Except Fuel Ethanol	--	111	--	33	-79	9	50	5	0
Other Hydrocarbons	--	--	--	0	0	0	1	--	0
Unfinished Oils	--	--	--	762	--	198	197	210	157
Motor Gasoline Blend.Comp. (MGBC) ⁵	--	0	--	596	209	-244	964	84	0
Reformulated	--	0	--	287	296	54	528	1	0
Conventional	--	0	--	308	-87	-298	436	83	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	0	2	--	-2
Finished Petroleum Products	--	5	19,359	731	-113	-568	--	3,091	17,458
Finished Motor Gasoline	--	5	10,254	114	-183	10	--	843	9,337
Reformulated	--	--	3,253	--	-294	0	--	--	2,960
Conventional	--	5	7,001	114	111	11	--	843	6,377
Finished Aviation Gasoline	--	--	13	1	--	0	--	--	14
Kerosene-Type Jet Fuel	--	--	1,653	148	--	-146	--	222	1,726
Kerosene	--	--	16	9	--	16	--	7	2
Distillate Fuel Oil ⁵	--	--	4,793	178	70	-375	--	1,192	4,222
15 ppm sulfur and under	--	--	4,463	177	70	-397	--	904	4,203
Greater than 15 ppm to 500 ppm sulfur	--	--	128	0	--	-10	--	129	10
Greater than 500 ppm sulfur	--	--	201	1	--	32	--	160	10
Residual Fuel Oil ⁶	--	--	340	116	--	-11	--	146	320
Less than 0.31 percent sulfur	--	--	51	--	--	0	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	40	53	--	-20	--	NA	NA
Greater than 1.00 percent sulfur	--	--	248	63	--	9	--	NA	NA
Petrochemical Feedstocks	--	--	248	11	--	4	--	--	256
Naphtha for Petro. Feed. Use	--	--	132	9	--	1	--	--	139
Other Oils for Petro. Feed. Use	--	--	117	2	--	2	--	--	116
Special Naphthas	--	--	32	17	--	-5	--	--	54
Lubricants	--	--	171	75	--	29	--	87	130
Waxes	--	--	5	6	--	1	--	5	5
Petroleum Coke	--	--	805	8	--	6	--	562	244
Marketable	--	--	586	8	--	6	--	562	25
Catalyst	--	--	219	--	--	--	--	--	219
Asphalt and Road Oil	--	--	325	47	--	-96	--	25	444
Still Gas	--	--	623	--	--	--	--	--	623
Miscellaneous Products	--	--	81	0	--	-1	--	3	79
Total	17,677	1,182	19,769	8,580	771	-505	18,744	8,969	20,772

-- = Not Applicable.

- = No Data Reported.

NA = Not Available.

¹ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁴ Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

⁵ Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, the U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates.

Table 4. U.S. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 2019
(Thousand Barrels per Day)

Commodity	Supply					Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports	Adjustments ¹	Stock Change ²	Refinery and Blender Net Inputs	Exports	Products Supplied ³
Crude Oil⁴	12,109	--	--	6,888	434	-18	16,547	2,903	0
Hydrocarbon Gas Liquids	4,781	-20	666	203	--	226	539	1,784	3,081
Natural Gas Liquids	4,781	-20	388	182	--	222	539	1,784	2,786
Ethane	1,822	--	--	--	--	33	--	276	1,518
Propane	1,567	--	284	129	--	102	--	1,061	817
Normal Butane	423	--	110	40	--	78	155	280	60
Isobutane	416	--	-83	13	--	9	217	5	186
Natural Gasoline	553	-20	--	0	--	0	167	161	205
Refinery Olefins	--	--	278	21	--	4	--	--	295
Ethylene	--	--	0	--	--	0	--	--	0
Propylene	--	--	282	15	--	-1	--	--	298
Normal Butylene	--	--	-4	6	--	6	--	--	-4
Isobutylene	--	--	262	0	--	0	--	--	0
Other Liquids	--	1,221	--	1,391	201	-30	2,309	489	45
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	1,221	--	43	94	-8	1,196	171	0
Hydrogen	--	--	--	--	209	--	209	--	0
Oxygenates (excluding Fuel Ethanol)	--	84	--	3	-20	0	0	67	0
Renewable Fuels (including Fuel Ethanol)	--	1,138	--	40	-95	-8	986	104	0
Fuel Ethanol ⁵	--	1,023	--	13	-19	-5	927	96	0
Renewable Fuels Except Fuel Ethanol	--	115	--	27	-77	-3	59	8	0
Other Hydrocarbons	--	--	--	0	1	0	1	--	0
Unfinished Oils	--	--	--	629	--	41	315	228	45
Motor Gasoline Blend.Comp. (MGBC) ⁵	--	0	--	719	107	-63	798	90	0
Reformulated	--	0	--	187	217	-10	414	1	0
Conventional	--	0	--	531	-110	-53	385	90	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	0	0	--	-1
Finished Petroleum Products	--	4	19,793	710	-18	-104	--	3,253	17,341
Finished Motor Gasoline	--	4	10,086	83	-89	-8	--	778	9,315
Reformulated	--	--	3,240	--	-209	0	--	--	3,030
Conventional	--	4	6,847	83	121	-8	--	778	6,285
Finished Aviation Gasoline	--	--	12	1	--	0	--	--	13
Kerosene-Type Jet Fuel	--	--	1,783	167	--	-6	--	217	1,739
Kerosene	--	--	7	1	--	0	--	3	6
Distillate Fuel Oil ⁵	--	--	5,109	183	70	-65	--	1,337	4,091
15 ppm sulfur and under	--	--	4,780	170	70	-63	--	1,067	4,017
Greater than 15 ppm to 500 ppm sulfur	--	--	127	2	--	-4	--	122	11
Greater than 500 ppm sulfur	--	--	202	11	--	1	--	149	63
Residual Fuel Oil ⁶	--	--	377	141	--	4	--	235	279
Less than 0.31 percent sulfur	--	--	56	13	--	4	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	50	22	--	-2	--	NA	NA
Greater than 1.00 percent sulfur	--	--	271	106	--	2	--	NA	NA
Petrochemical Feedstocks	--	--	297	16	--	-1	--	--	314
Naphtha for Petro. Feed. Use	--	--	192	14	--	-1	--	--	206
Other Oils for Petro. Feed. Use	--	--	105	3	--	0	--	--	108
Special Naphthas	--	--	31	17	--	-1	--	--	49
Lubricants	--	--	167	47	--	-5	--	106	113
Waxes	--	--	5	5	--	0	--	4	6
Petroleum Coke	--	--	840	6	--	3	--	545	299
Marketable	--	--	621	6	--	3	--	545	80
Catalyst	--	--	219	--	--	--	--	--	219
Asphalt and Road Oil	--	--	328	43	--	-24	--	26	369
Still Gas	--	--	665	--	--	--	--	--	665
Miscellaneous Products	--	--	86	0	--	0	--	2	84
Total	16,890	1,205	20,459	9,192	617	73	19,396	8,429	20,466

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁴ Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

⁵ Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, the U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates.

Table 5. PAD District 1 - Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, October 2019
(Thousand Barrels)

Commodity	Supply						Disposition				
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	Ending Stocks
Crude Oil	2,390	--	--	16,372	6,663	-1,815	965	22,644	1	0	10,744
Hydrocarbon Gas Liquids	16,822	-14	676	1,294	1,210	--	-574	2,264	6,315	11,983	11,376
Natural Gas Liquids	16,822	-14	195	1,011	1,098	--	-499	2,264	6,315	11,032	11,110
Ethane	5,960	--	--	--	--	--	-143	--	1,463	-338	520
Propane	6,276	--	459	789	5,196	--	309	--	3,765	8,646	8,210
Normal Butane	1,992	--	-205	136	1,519	--	-601	1,773	962	1,308	1,932
Isobutane	837	--	-59	86	-354	--	21	169	1	319	176
Natural Gasoline	1,757	-14	--	--	-285	--	-85	322	125	1,096	272
Refinery Olefins	--	--	481	283	--	--	-75	--	--	951	266
Ethylene	--	--	16	--	--	--	--	--	--	16	--
Propylene	--	--	523	283	--	--	-10	--	--	928	145
Normal Butylene	--	--	-58	--	--	--	-39	--	--	-19	121
Isobutylene	--	--	--	--	--	--	-26	--	--	26	0
Other Liquids	--	874	--	19,207	61,261	5,157	-4,139	90,258	295	85	69,029
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	877	--	151	9,300	484	-305	10,950	167	0	8,016
Hydrogen	--	--	--	--	--	106	--	106	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	1	--	--	1	0	--
Renewable Fuels (including Fuel Ethanol)	--	877	--	151	9,300	378	-305	10,844	167	0	8,016
Fuel Ethanol	--	730	--	--	9,144	521	-293	10,596	91	0	6,851
Renewable Fuels Except Fuel Ethanol	--	147	--	151	157	-143	-12	248	76	0	1,165
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	3,052	--	--	564	2,376	27	85	4,696
Motor Gasoline Blend.Comp. (MGBC)	--	-3	--	16,004	51,961	4,673	-4,398	76,932	101	0	56,317
Reformulated	--	--	--	8,905	8,602	2,583	655	19,434	1	0	19,190
Conventional	--	-3	--	7,099	43,359	2,090	-5,053	57,498	100	0	37,127
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	115,967	12,159	41,722	-5,050	-4,606	--	3,822	165,582	65,582
Finished Motor Gasoline	--	--	101,877	2,576	2,968	-5,194	-290	--	978	101,540	3,923
Reformulated	--	--	40,389	--	--	-2,340	-12	--	--	38,061	24
Conventional	--	--	61,488	2,576	2,968	-2,854	-278	--	978	63,479	3,899
Finished Aviation Gasoline	--	--	--	1	117	--	3	--	--	115	198
Kerosene-Type Jet Fuel	--	--	2,066	1,156	15,866	--	-1,591	--	869	19,810	9,002
Kerosene	--	--	137	287	117	--	196	--	191	154	1,884
Distillate Fuel Oil ⁶	--	--	7,714	4,774	20,215	144	-2,877	--	297	35,427	37,268
15 ppm sulfur and under	--	--	7,615	4,756	19,169	144	-3,544	--	19	35,209	31,737
Greater than 15 ppm to 500 ppm sulfur	--	--	-7	6	4	--	102	--	262	-361	1,567
Greater than 500 ppm sulfur	--	--	106	12	1,042	--	565	--	16	579	3,964
Residual Fuel Oil ⁷	--	--	664	1,813	--	--	590	--	47	1,840	7,539
Less than 0.31 percent sulfur	--	--	26	--	--	--	188	--	NA	NA	1,757
0.31 to 1.00 percent sulfur	--	--	339	880	--	--	497	--	NA	NA	1,563
Greater than 1.00 percent sulfur	--	--	299	933	--	--	-95	--	NA	NA	4,219
Petrochemical Feedstocks	--	--	5	4	--	--	5	--	--	4	48
Naphtha for Petro. Feed. Use	--	--	5	4	--	--	5	--	--	4	48
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	21	--	--	--	4	--	--	17	40
Lubricants	--	--	420	492	456	--	164	--	177	1,027	1,254
Waxes	--	--	9	72	--	--	10	--	78	-7	352
Petroleum Coke	--	--	830	1	731	--	--	--	1,118	444	--
Marketable	--	--	366	1	731	--	--	--	1,118	-20	--
Catalyst	--	--	464	--	--	--	--	--	--	464	--
Asphalt and Road Oil	--	--	1,154	983	1,253	--	-821	--	52	4,158	4,040
Still Gas	--	--	978	--	--	--	--	--	--	978	--
Miscellaneous Products	--	--	92	--	--	--	1	--	15	76	34
Total	19,212	860	116,643	49,032	110,857	-1,708	-8,354	115,166	10,433	177,651	156,731

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

⁷ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report", EIA-812, "Monthly Product Pipeline Report", EIA-813, "Monthly Crude Oil Report", EIA-814, "Monthly Imports Report", EIA-815, "Monthly Bulk Terminal and Blender Report", EIA-816, "Monthly Natural Gas Liquids Report", EIA-817, "Monthly Tanker and Barge Movements Report", and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 6. PAD District 1 - Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 2019
(Thousand Barrels)

Commodity	Supply						Disposition				
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	Ending Stocks
Crude Oil	20,357	--	--	204,352	54,257	1,678	-911	277,996	3,560	0	10,744
Hydrocarbon Gas Liquids	165,704	-143	10,590	14,143	-18,062	--	2,339	12,847	61,929	95,117	11,376
Natural Gas Liquids	165,704	-143	6,724	11,639	-20,869	--	2,361	12,847	61,929	85,918	11,110
Ethane	64,830	--	--	--	--	--	-323	--	10,890	2,013	520
Propane	57,953	--	5,172	9,500	32,037	--	2,223	--	37,330	65,109	8,210
Normal Butane	18,448	--	1,635	597	4,146	--	512	7,836	12,318	4,160	1,932
Isobutane	7,951	--	-83	1,542	-2,232	--	-18	3,433	10	3,753	176
Natural Gasoline	16,522	-143	--	--	-2,570	--	-33	1,578	1,381	10,883	272
Refinery Olefins	--	--	3,866	2,504	--	--	-22	--	--	9,199	266
Ethylene	--	--	100	--	--	--	--	--	--	100	--
Propylene	--	--	3,943	2,504	--	--	24	--	--	9,230	145
Normal Butylene	--	--	-439	--	--	--	14	--	--	-453	121
Isobutylene	--	--	262	--	--	--	-60	--	--	322	0
Other Liquids	--	9,131	--	198,354	607,592	51,183	-3,306	866,975	1,881	710	69,029
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	9,161	--	1,481	98,011	-219	-100	107,179	1,354	0	8,016
Hydrogen	--	--	--	--	--	957	--	957	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	7	--	--	7	0	--
Renewable Fuels (including Fuel Ethanol)	--	9,161	--	1,481	98,011	-1,183	-100	106,222	1,347	0	8,016
Fuel Ethanol	--	7,356	--	--	95,690	1,493	270	103,090	1,179	0	6,851
Renewable Fuels Except Fuel Ethanol	--	1,805	--	1,481	2,321	-2,676	-370	3,132	168	0	1,165
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	16,110	164	--	-509	15,806	267	710	4,696
Motor Gasoline Blend Comp. (MGBC)	--	-30	--	180,763	509,417	51,402	-2,697	743,990	259	0	56,317
Reformulated	--	--	--	54,051	80,594	25,583	358	159,856	14	0	19,190
Conventional	--	-30	--	126,712	428,823	25,820	-3,055	584,134	246	0	37,127
Aviation Gasoline Blend Comp.	--	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	1,161,120	116,184	460,679	-50,369	-7,492	--	42,116	1,652,991	65,582
Finished Motor Gasoline	--	--	997,678	19,321	46,593	-52,895	43	--	5,008	1,005,646	3,923
Reformulated	--	--	395,034	--	--	-24,614	-6	--	--	370,426	24
Conventional	--	--	602,644	19,321	46,593	-28,281	49	--	5,008	635,220	3,899
Finished Aviation Gasoline	--	--	--	123	815	--	68	--	--	870	198
Kerosene-Type Jet Fuel	--	--	29,494	16,770	150,317	--	1,126	--	5,775	189,680	9,002
Kerosene	--	--	639	388	1,001	--	-168	--	472	1,724	1,884
Distillate Fuel Oil ⁶	--	--	86,021	45,763	240,111	2,526	-7,604	--	11,968	370,057	37,268
15 ppm sulfur and under	--	--	81,469	43,853	227,883	2,526	-5,941	--	7,734	353,938	31,737
Greater than 15 ppm to 500 ppm sulfur	--	--	1,748	651	148	--	-1,035	--	2,984	598	1,567
Greater than 500 ppm sulfur	--	--	2,804	1,259	12,080	--	-628	--	1,250	15,521	3,964
Residual Fuel Oil ⁷	--	--	10,814	21,625	-468	--	1,506	--	9,476	20,989	7,539
Less than 0.31 percent sulfur	--	--	1,956	996	--	--	856	--	NA	NA	1,757
0.31 to 1.00 percent sulfur	--	--	4,572	2,882	--	--	134	--	NA	NA	1,563
Greater than 1.00 percent sulfur	--	--	4,286	17,747	-468	--	516	--	NA	NA	4,219
Petrochemical Feedstocks	--	--	390	26	573	--	-32	--	--	1,021	48
Naphtha for Petro. Feed. Use	--	--	390	12	--	--	-32	--	--	434	48
Other Oils for Petro. Feed. Use	--	--	--	14	573	--	--	--	--	587	--
Special Naphthas	--	--	208	8	--	--	-3	--	--	219	40
Lubricants	--	--	3,850	2,495	4,618	--	-47	--	2,186	8,824	1,254
Waxes	--	--	94	687	--	--	-24	--	581	224	352
Petroleum Coke	--	--	8,028	25	5,710	--	--	--	5,663	8,100	--
Marketable	--	--	2,660	25	5,710	--	--	--	5,663	2,732	--
Catalyst	--	--	5,368	--	--	--	--	--	--	5,368	--
Asphalt and Road Oil	--	--	10,892	8,953	11,640	--	-2,357	--	849	32,993	4,040
Still Gas	--	--	12,254	--	--	--	--	--	--	12,254	--
Miscellaneous Products	--	--	758	--	-231	--	0	--	138	389	34
Total	186,061	8,988	1,171,710	533,033	1,104,467	2,492	-9,370	1,157,818	109,486	1,748,817	156,731

-- = Not Applicable.

NA = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

⁷ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 7. PAD District 1 - Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 2019
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil	77	--	--	528	215	-59	31	730	0	0
Hydrocarbon Gas Liquids	543	0	22	42	39	--	-19	73	204	387
Natural Gas Liquids	543	0	6	33	35	--	-16	73	204	356
Ethane	192	--	--	--	--	--	-5	--	47	-11
Propane	202	--	15	25	168	--	10	--	--	279
Normal Butane	64	--	-7	4	49	--	-19	57	31	42
Isobutane	27	--	-2	3	-11	--	1	5	0	10
Natural Gasoline	57	0	--	--	-9	--	-3	10	4	35
Refinery Olefins	--	--	16	9	--	--	-2	--	--	31
Ethylene	--	--	1	--	--	--	--	--	--	1
Propylene	--	--	17	9	4	--	0	--	--	30
Normal Butylene	--	--	-2	--	--	--	-1	--	--	-1
Isobutylene	--	--	--	--	--	--	-1	--	--	1
Other Liquids	--	28	--	620	1,976	166	-134	2,912	10	3
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	28	--	5	300	16	-10	353	5	0
Hydrogen	--	--	--	--	--	3	--	3	--	0
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	--	--	0	0
Renewable Fuels (including Fuel Ethanol)	--	28	--	5	300	12	-10	350	5	0
Fuel Ethanol ⁶	--	24	--	--	295	17	-9	342	3	0
Renewable Fuels Except Fuel Ethanol	--	5	--	5	5	-5	0	8	2	0
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	98	--	--	18	77	1	3
Motor Gasoline Blend.Comp. (MGBC) ⁶	--	0	--	516	1,676	151	-142	2,482	3	0
Reformulated	--	--	--	287	277	83	21	627	0	0
Conventional	--	0	--	229	1,399	67	-163	1,855	3	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	3,741	392	1,346	-163	-149	--	123	5,341
Finished Motor Gasoline	--	--	3,286	83	96	-168	-9	--	32	3,275
Reformulated	--	--	1,303	--	--	-75	0	--	--	1,228
Conventional	--	--	1,983	83	96	-92	-9	--	32	2,048
Finished Aviation Gasoline	--	--	--	0	4	--	0	--	--	4
Kerosene-Type Jet Fuel	--	--	67	37	512	--	-51	--	28	639
Kerosene	--	--	4	9	4	--	6	--	6	5
Distillate Fuel Oil ⁶	--	--	249	154	652	5	-93	--	10	1,143
15 ppm sulfur and under	--	--	246	153	618	5	-114	--	1	1,136
Greater than 15 ppm to 500 ppm sulfur	--	--	0	0	0	--	3	--	8	-12
Greater than 500 ppm sulfur	--	--	3	0	34	--	18	--	1	19
Residual Fuel Oil ⁷	--	--	21	58	--	--	19	--	2	59
Less than 0.31 percent sulfur	--	--	1	--	--	--	6	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	11	28	--	--	16	--	NA	NA
Greater than 1.00 percent sulfur	--	--	10	30	--	--	-3	--	NA	NA
Petrochemical Feedstocks	--	--	0	0	--	--	0	--	--	0
Naphtha for Petro. Feed. Use	--	--	0	0	--	--	0	--	--	0
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	1	--	--	--	0	--	--	1
Lubricants	--	--	14	16	15	--	5	--	6	33
Waxes	--	--	0	2	--	--	0	--	3	0
Petroleum Coke	--	--	27	0	24	--	--	--	36	14
Marketable	--	--	12	0	24	--	--	--	36	-1
Catalyst	--	--	15	--	--	--	--	--	--	15
Asphalt and Road Oil	--	--	37	32	40	--	-26	--	2	134
Still Gas	--	--	32	--	--	--	--	--	--	32
Miscellaneous Products	--	--	3	--	--	--	0	--	0	2
Total	620	28	3,763	1,582	3,576	-55	-269	3,715	337	5,731

-- = Not Applicable.

NA = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

⁷ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 8. PAD District 1 - Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 2019
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil	67	--	--	672	178	6	-3	914	12	0
Hydrocarbon Gas Liquids	545	0	35	47	-59	--	8	42	204	313
Natural Gas Liquids	545	0	22	38	-69	--	8	42	204	283
Ethane	213	--	--	--	--	--	-1	--	36	7
Propane	191	--	17	31	105	--	7	--	--	214
Normal Butane	61	--	5	2	14	--	2	26	41	14
Isobutane	26	--	0	5	-7	--	0	11	0	12
Natural Gasoline	54	0	--	--	-8	--	0	5	5	36
Refinery Olefins	--	--	13	8	--	--	0	--	--	30
Ethylene	--	--	0	--	--	--	--	--	--	0
Propylene	--	--	13	8	9	--	0	--	--	30
Normal Butylene	--	--	-1	--	--	--	0	--	--	-1
Isobutylene	--	--	1	--	--	--	0	--	--	1
Other Liquids	--	30	--	652	1,999	168	-11	2,852	6	2
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	30	--	5	322	-1	0	353	4	0
Hydrogen	--	--	--	--	--	3	--	3	--	0
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	--	--	0	0
Renewable Fuels (including Fuel Ethanol)	--	30	--	5	322	-4	0	349	4	0
Fuel Ethanol ⁶	--	24	--	--	315	5	1	339	4	0
Renewable Fuels Except Fuel Ethanol	--	6	--	5	8	-9	-1	10	1	0
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	53	1	--	-2	52	1	2
Motor Gasoline Blend.Comp. (MGBC) ⁶	--	0	--	595	1,676	169	-9	2,447	1	0
Reformulated	--	--	--	178	265	84	1	526	0	0
Conventional	--	0	--	417	1,411	85	-10	1,921	1	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	3,819	382	1,515	-166	-25	--	139	5,437
Finished Motor Gasoline	--	--	3,282	64	153	-174	0	--	16	3,308
Reformulated	--	--	1,299	--	--	-81	0	--	--	1,219
Conventional	--	--	1,982	64	153	-93	0	--	16	2,090
Finished Aviation Gasoline	--	--	--	0	3	--	0	--	--	3
Kerosene-Type Jet Fuel	--	--	97	55	494	--	4	--	19	624
Kerosene	--	--	2	1	3	--	-1	--	2	6
Distillate Fuel Oil ⁶	--	--	283	151	790	8	-25	--	39	1,217
15 ppm sulfur and under	--	--	268	144	750	8	-20	--	25	1,164
Greater than 15 ppm to 500 ppm sulfur	--	--	6	2	0	--	-3	--	10	2
Greater than 500 ppm sulfur	--	--	9	4	40	--	-2	--	4	51
Residual Fuel Oil ⁷	--	--	36	71	-2	--	5	--	31	69
Less than 0.31 percent sulfur	--	--	6	3	--	--	3	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	15	9	--	--	0	--	NA	NA
Greater than 1.00 percent sulfur	--	--	14	58	-2	--	2	--	NA	NA
Petrochemical Feedstocks	--	--	1	0	2	--	0	--	--	3
Naphtha for Petro. Feed. Use	--	--	1	0	--	--	0	--	--	1
Other Oils for Petro. Feed. Use	--	--	--	0	2	--	--	--	--	2
Special Naphthas	--	--	1	0	--	--	0	--	--	1
Lubricants	--	--	13	8	15	--	0	--	7	29
Waxes	--	--	0	2	--	--	0	--	2	1
Petroleum Coke	--	--	26	0	19	--	--	--	19	27
Marketable	--	--	9	0	19	--	--	--	19	9
Catalyst	--	--	18	--	--	--	--	--	--	18
Asphalt and Road Oil	--	--	36	29	38	--	-8	--	3	109
Still Gas	--	--	40	--	--	--	--	--	--	40
Miscellaneous Products	--	--	2	--	-1	--	0	--	0	1
Total	612	30	3,854	1,753	3,633	8	-31	3,809	360	5,753

-- = Not Applicable.

NA = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

⁷ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 9. PAD District 2 - Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, October 2019
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	
Crude Oil	71,214	--	--	84,574	-26,626	-4,057	6,646	113,258	5,201	0	134,625
Hydrocarbon Gas Liquids	34,372	-589	998	2,324	-16,013	--	-4,113	4,259	9,789	11,157	60,972
Natural Gas Liquids	34,372	-589	26	2,069	-15,619	--	-3,954	4,259	9,789	10,165	60,389
Ethane	11,454	--	--	--	--	--	-122	--	3,023	3,255	5,856
Propane	12,407	--	1,880	1,243	-10,103	--	-1,681	--	221	6,887	25,626
Normal Butane	4,341	--	-1,703	662	-4,261	--	-2,970	1,466	45	498	16,816
Isobutane	2,060	--	-151	160	101	--	-166	1,638	1	697	1,979
Natural Gasoline	4,110	-589	--	4	3,942	--	985	1,155	6,499	-1,172	10,112
Refinery Olefins	--	--	972	255	--	--	-159	--	--	992	583
Ethylene	--	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	1,054	196	--	--	2	--	--	854	488
Normal Butylene	--	--	-82	59	--	--	-161	--	--	138	95
Isobutylene	--	--	--	--	--	--	0	--	--	0	0
Other Liquids	--	30,983	--	257	-13,438	-768	-3,507	20,161	2,247	-1,867	62,775
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	30,985	--	99	-19,453	-1,764	-201	9,384	684	0	8,016
Hydrogen	--	--	--	--	--	993	--	993	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	2	0	--	2	0	2
Renewable Fuels (including Fuel Ethanol)	--	30,985	--	99	-19,453	-2,784	-208	8,373	682	0	7,992
Fuel Ethanol	--	28,654	--	--	-18,907	-1,425	-246	7,929	639	0	7,157
Renewable Fuels Except Fuel Ethanol	--	2,331	--	99	-546	-1,359	38	444	43	0	835
Other Hydrocarbons	--	--	--	--	--	25	7	18	--	0	22
Unfinished Oils	--	--	--	86	-1,154	--	868	-1,564	1,495	-1,867	14,615
Motor Gasoline Blend.Comp. (MGBC)	--	-2	--	72	7,169	996	-4,174	12,341	68	0	40,144
Reformulated	--	-1	--	--	1,345	725	-221	2,290	--	0	5,031
Conventional	--	-1	--	72	5,824	271	-3,953	10,051	68	0	35,113
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	141	143,153	988	1,376	1,792	-7,400	--	1,492	153,357	54,275
Finished Motor Gasoline	--	141	83,200	--	250	429	359	--	222	83,439	6,991
Reformulated	--	--	11,446	--	--	-582	--	--	--	10,864	--
Conventional	--	141	71,754	--	250	1,011	359	--	222	72,575	6,991
Finished Aviation Gasoline	--	--	44	7	20	--	16	--	--	55	143
Kerosene-Type Jet Fuel	--	--	8,105	--	1,077	--	-722	--	61	9,843	7,001
Kerosene	--	--	239	--	--	--	60	--	1	178	214
Distillate Fuel Oil	--	--	33,965	87	2,281	1,363	-6,182	--	368	43,510	26,823
15 ppm sulfur and under	--	--	34,231	75	2,201	1,363	-5,956	--	1	43,825	25,985
Greater than 15 ppm to 500 ppm sulfur	--	--	-41	--	80	--	-221	--	162	98	387
Greater than 500 ppm sulfur	--	--	-225	12	--	--	-5	--	205	-413	451
Residual Fuel Oil ⁶	--	--	1,369	185	-458	--	-10	--	128	978	1,176
Less than 0.31 percent sulfur	--	--	56	--	-34	--	-10	--	NA	NA	64
0.31 to 1.00 percent sulfur	--	--	180	28	--	--	-44	--	NA	NA	177
Greater than 1.00 percent sulfur	--	--	1,133	157	-424	--	44	--	NA	NA	935
Petrochemical Feedstocks	--	--	934	132	-97	--	-17	--	--	986	539
Naphtha for Petro. Feed. Use	--	--	572	77	-97	--	-18	--	--	570	438
Other Oils for Petro. Feed. Use	--	--	362	55	--	--	1	--	--	416	101
Special Naphthas	--	--	30	4	13	--	-7	--	--	54	156
Lubricants	--	--	167	134	185	--	81	--	183	222	805
Waxes	--	--	27	21	--	--	0	--	37	11	68
Petroleum Coke	--	--	5,253	32	-1,339	--	47	--	333	3,567	1,838
Marketable	--	--	3,948	32	-1,339	--	47	--	333	2,262	1,838
Catalyst	--	--	1,305	--	--	--	--	--	--	1,305	--
Asphalt and Road Oil	--	--	5,327	386	-563	--	-1,020	--	159	6,011	8,422
Still Gas	--	--	4,089	--	--	--	--	--	--	4,089	--
Miscellaneous Products	--	--	404	--	6	--	-5	--	1	414	99
Total	105,586	30,535	144,151	88,143	-54,701	-3,033	-8,374	137,678	18,729	162,648	312,647

-- = Not Applicable.

NA = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 10. PAD District 2 - Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 2019
(Thousand Barrels)

Commodity	Supply						Disposition				
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	Ending Stocks
Crude Oil	667,998	--	--	864,406	-268,724	-60,351	2,523	1,151,556	49,249	0	134,625
Hydrocarbon Gas Liquids	311,456	-5,721	39,887	26,685	-108,950	--	10,941	28,299	75,357	148,760	60,972
Natural Gas Liquids	311,456	-5,721	26,905	23,933	-102,821	--	10,787	28,299	75,357	139,309	60,389
Ethane	103,366	--	--	--	--	--	665	--	27,677	39,064	5,856
Propane	112,822	--	22,251	16,541	-72,910	--	4,967	--	1,099	72,638	25,626
Normal Butane	39,178	--	18	5,510	-30,084	--	5,427	5,467	1,510	7,569	16,816
Isobutane	19,076	--	-697	1,834	-1,972	--	27	14,701	8	3,505	1,979
Natural Gasoline	37,014	-5,721	--	48	38,105	--	-299	8,131	45,082	16,532	10,112
Refinery Olefins	--	--	12,982	2,752	--	--	154	--	--	9,451	583
Ethylene	--	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	12,145	2,116	--	--	133	--	--	7,999	488
Normal Butylene	--	--	792	606	--	--	91	--	--	1,307	95
Isobutylene	--	--	45	--	--	--	-70	--	--	145	0
Other Liquids	--	312,196	--	4,285	-114,968	-16,698	-9,175	183,968	25,145	-15,123	62,775
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	312,210	--	832	-201,436	-13,816	-1,605	92,159	7,237	0	8,016
Hydrogen	--	--	--	--	--	11,122	--	11,122	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	15	-2	--	17	0	2
Renewable Fuels (including Fuel Ethanol)	--	312,210	--	832	-201,436	-25,255	-1,604	80,735	7,220	0	7,992
Fuel Ethanol	--	288,666	--	--	-194,242	-14,444	-1,522	75,658	5,845	0	7,157
Renewable Fuels Except Fuel Ethanol	--	23,544	--	832	-7,194	-10,811	-82	5,077	1,376	0	835
Other Hydrocarbons	--	--	--	--	--	303	1	302	--	0	22
Unfinished Oils	--	--	--	883	-5,246	--	1,871	-7,560	16,449	-15,123	14,615
Motor Gasoline Blend.Comp. (MGBC)	--	-14	--	2,570	91,714	-2,883	-9,441	99,369	1,459	0	40,144
Reformulated	--	-4	--	--	32,800	-15,165	-1,158	18,789	--	0	5,031
Conventional	--	-10	--	2,570	58,914	12,282	-8,283	80,580	1,459	0	35,113
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	1,259	1,390,781	9,524	17,537	28,308	-9,776	--	12,735	1,444,450	54,275
Finished Motor Gasoline	--	1,259	789,920	1	5,786	17,326	487	--	1,679	812,126	6,991
Reformulated	--	--	108,866	--	--	18,256	--	--	--	127,122	--
Conventional	--	1,259	681,054	1	5,786	-930	487	--	1,679	685,004	6,991
Finished Aviation Gasoline	--	--	339	37	139	--	-23	--	--	538	143
Kerosene-Type Jet Fuel	--	--	83,082	--	9,328	--	-536	--	511	92,435	7,001
Kerosene	--	--	992	--	20	--	-67	--	6	1,073	214
Distillate Fuel Oil	--	--	345,481	2,738	23,784	10,981	-6,830	--	2,562	387,252	26,823
15 ppm sulfur and under	--	--	345,673	2,003	22,655	10,981	-6,949	--	93	388,168	25,985
Greater than 15 ppm to 500 ppm sulfur	--	--	767	--	1,078	--	5	--	1,034	806	387
Greater than 500 ppm sulfur	--	--	-959	735	51	--	114	--	1,435	-1,722	451
Residual Fuel Oil ⁶	--	--	13,052	812	-6,559	--	-104	--	1,461	5,948	1,176
Less than 0.31 percent sulfur	--	--	666	--	-620	--	7	--	NA	NA	64
0.31 to 1.00 percent sulfur	--	--	1,830	221	-149	--	-97	--	NA	NA	177
Greater than 1.00 percent sulfur	--	--	10,556	591	-5,790	--	-14	--	NA	NA	935
Petrochemical Feedstocks	--	--	9,419	1,498	-825	--	-26	--	--	10,118	539
Naphtha for Petro. Feed. Use	--	--	6,183	798	-751	--	11	--	--	6,219	438
Other Oils for Petro. Feed. Use	--	--	3,236	700	-74	--	-37	--	--	3,899	101
Special Naphthas	--	--	-60	53	204	--	-27	--	--	224	156
Lubricants	--	--	1,889	1,207	1,426	--	-22	--	1,897	2,647	805
Waxes	--	--	297	62	--	--	40	--	338	-19	68
Petroleum Coke	--	--	55,016	286	-8,520	--	500	--	2,951	43,331	1,838
Marketable	--	--	40,999	286	-8,520	--	500	--	2,951	29,314	1,838
Catalyst	--	--	14,017	--	--	--	--	--	--	14,017	--
Asphalt and Road Oil	--	--	43,988	2,830	-7,248	--	-3,150	--	1,306	41,414	8,422
Still Gas	--	--	42,836	--	--	--	--	--	--	42,836	--
Miscellaneous Products	--	--	4,530	--	2	--	-18	--	24	4,526	99
Total	979,454	307,734	1,430,668	904,900	-475,104	-48,742	-5,487	1,363,823	162,487	1,578,087	312,647

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 11. PAD District 2 - Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 2019
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil	2,297	--	--	2,728	-859	-131	214	3,653	168	0
Hydrocarbon Gas Liquids	1,109	-19	32	75	-517	--	-133	137	316	360
Natural Gas Liquids	1,109	-19	1	67	-504	--	-128	137	316	328
Ethane	369	--	--	--	--	--	-4	--	98	105
Propane	400	--	61	40	-326	--	-54	--	7	222
Normal Butane	140	--	-986	21	-137	--	-96	47	1	16
Isobutane	66	--	-5	5	3	--	-5	53	0	22
Natural Gasoline	133	-19	--	0	127	--	32	37	210	-38
Refinery Olefins	--	--	31	8	--	--	-5	--	--	32
Ethylene	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	34	6	-13	--	0	--	--	28
Normal Butylene	--	--	-3	2	--	--	-5	--	--	4
Isobutylene	--	--	--	--	--	--	0	--	--	0
Other Liquids	--	999	--	8	-433	-25	-113	650	72	-60
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	1,000	--	3	-628	-57	-6	303	22	0
Hydrogen	--	--	--	--	--	32	--	32	--	0
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	0	--	0	0
Renewable Fuels (including Fuel Ethanol)	--	1,000	--	3	-628	-90	-7	270	22	0
Fuel Ethanol	--	924	--	--	-610	-46	-8	256	21	0
Renewable Fuels Except Fuel Ethanol	--	75	--	3	-18	-44	1	14	1	0
Other Hydrocarbons	--	--	--	--	--	1	0	1	--	0
Unfinished Oils	--	--	--	3	-37	--	28	-50	48	-60
Motor Gasoline Blend.Comp. (MGBC)	--	0	--	2	231	32	-135	398	2	0
Reformulated	--	0	--	--	43	23	-7	74	--	0
Conventional	--	0	--	2	188	9	-128	324	2	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	5	4,618	32	44	58	-239	--	48	4,947
Finished Motor Gasoline	--	5	2,684	--	8	14	12	--	7	2,692
Reformulated	--	--	369	--	--	-19	--	--	--	350
Conventional	--	5	2,315	--	8	33	12	--	7	2,341
Finished Aviation Gasoline	--	--	1	0	1	--	1	--	--	2
Kerosene-Type Jet Fuel	--	--	261	--	35	--	-23	--	2	318
Kerosene	--	--	8	--	--	--	2	--	0	6
Distillate Fuel Oil	--	--	1,096	3	74	44	-199	--	12	1,404
15 ppm sulfur and under	--	--	1,104	2	71	44	-192	--	0	1,414
Greater than 15 ppm to 500 ppm sulfur	--	--	-1	--	3	--	-7	--	5	3
Greater than 500 ppm sulfur	--	--	-7	0	--	--	0	--	7	-13
Residual Fuel Oil ⁶	--	--	44	6	-15	--	0	--	4	32
Less than 0.31 percent sulfur	--	--	2	--	-1	--	0	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	6	1	--	--	-1	--	NA	NA
Greater than 1.00 percent sulfur	--	--	37	5	-14	--	1	--	NA	NA
Petrochemical Feedstocks	--	--	30	4	-3	--	-1	--	--	32
Naphtha for Petro. Feed. Use	--	--	18	2	-3	--	-1	--	--	18
Other Oils for Petro. Feed. Use	--	--	12	2	--	--	0	--	--	13
Special Naphthas	--	--	1	0	0	--	0	--	--	2
Lubricants	--	--	5	4	6	--	3	--	6	7
Waxes	--	--	1	1	--	--	0	--	1	0
Petroleum Coke	--	--	169	1	-43	--	2	--	11	115
Marketable	--	--	127	1	-43	--	2	--	11	73
Catalyst	--	--	42	--	--	--	--	--	--	42
Asphalt and Road Oil	--	--	172	12	-18	--	-33	--	5	194
Still Gas	--	--	132	--	--	--	--	--	--	132
Miscellaneous Products	--	--	13	--	0	--	0	--	0	13
Total	3,406	985	4,650	2,843	-1,765	-98	-270	4,441	604	5,247

-- = Not Applicable.

- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 12. PAD District 2 - Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 2019
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil	2,197	--	--	2,843	-884	-199	8	3,788	162	0
Hydrocarbon Gas Liquids	1,025	-19	131	88	-358	--	36	93	248	489
Natural Gas Liquids	1,025	-19	89	79	-338	--	35	93	248	458
Ethane	340	--	--	--	--	--	2	--	91	128
Propane	371	--	73	54	-240	--	16	--	4	239
Normal Butane	129	--	18	18	-99	--	18	18	5	25
Isobutane	63	--	-2	6	-6	--	0	48	0	12
Natural Gasoline	122	-19	--	0	125	--	-1	27	148	54
Refinery Olefins	--	--	43	9	--	--	1	--	--	31
Ethylene	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	40	7	-20	--	0	--	--	26
Normal Butylene	--	--	3	2	--	--	0	--	--	4
Isobutylene	--	--	0	--	--	--	0	--	--	0
Other Liquids	--	1,027	--	14	-378	-55	-30	605	83	-50
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	1,027	--	3	-663	-45	-5	303	24	0
Hydrogen	--	--	--	--	--	37	--	37	--	0
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	0	--	0	0
Renewable Fuels (including Fuel Ethanol)	--	1,027	--	3	-663	-83	-5	266	24	0
Fuel Ethanol	--	950	--	--	-639	-48	-5	249	19	0
Renewable Fuels Except Fuel Ethanol	--	77	--	3	-24	-36	0	17	5	0
Other Hydrocarbons	--	--	--	--	--	1	0	1	--	0
Unfinished Oils	--	--	--	3	-17	--	6	-25	54	-50
Motor Gasoline Blend.Comp. (MGBC)	--	0	--	8	302	-9	-31	327	5	0
Reformulated	--	0	--	--	108	-50	-4	62	--	0
Conventional	--	0	--	8	194	40	-27	265	5	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	4	4,575	31	58	93	-32	--	42	4,751
Finished Motor Gasoline	--	4	2,598	0	19	57	2	--	6	2,671
Reformulated	--	--	358	--	--	60	--	--	--	418
Conventional	--	4	2,240	0	19	-3	2	--	6	2,253
Finished Aviation Gasoline	--	--	1	0	0	--	0	--	--	2
Kerosene-Type Jet Fuel	--	--	273	--	31	--	-2	--	2	304
Kerosene	--	--	3	--	0	--	0	--	0	4
Distillate Fuel Oil	--	--	1,136	9	78	36	-22	--	8	1,274
15 ppm sulfur and under	--	--	1,137	7	75	36	-23	--	0	1,277
Greater than 15 ppm to 500 ppm sulfur	--	--	3	--	4	--	0	--	3	3
Greater than 500 ppm sulfur	--	--	-3	2	0	--	0	--	5	-6
Residual Fuel Oil ⁶	--	--	43	3	-22	--	0	--	5	20
Less than 0.31 percent sulfur	--	--	2	--	-2	--	0	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	6	1	0	--	0	--	NA	NA
Greater than 1.00 percent sulfur	--	--	35	2	-19	--	0	--	NA	NA
Petrochemical Feedstocks	--	--	31	5	-3	--	0	--	--	33
Naphtha for Petro. Feed. Use	--	--	20	3	-2	--	0	--	--	20
Other Oils for Petro. Feed. Use	--	--	11	2	0	--	0	--	--	13
Special Naphthas	--	--	0	0	1	--	0	--	--	1
Lubricants	--	--	6	4	5	--	0	--	6	9
Waxes	--	--	1	0	--	--	0	--	1	0
Petroleum Coke	--	--	181	1	-28	--	2	--	10	143
Marketable	--	--	135	1	-28	--	2	--	10	96
Catalyst	--	--	46	--	--	--	--	--	--	46
Asphalt and Road Oil	--	--	145	9	-24	--	-10	--	4	136
Still Gas	--	--	141	--	--	--	--	--	--	141
Miscellaneous Products	--	--	15	--	0	--	0	--	0	15
Total	3,222	1,012	4,706	2,977	-1,563	-160	-18	4,486	534	5,191

-- = Not Applicable.

- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 13. PAD District 3 - Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, October 2019
(Thousand Barrels)

Commodity	Supply						Disposition				
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	Ending Stocks
Crude Oil⁶	258,940	--	--	37,813	35,334	25,326	-677	258,510	99,579	0	865,968
Hydrocarbon Gas Liquids	89,038	-13	9,646	76	23,892	--	-5,473	12,722	46,193	69,197	173,380
Natural Gas Liquids	89,038	-13	2,833	--	23,610	--	-6,648	12,722	46,193	63,201	165,052
Ethane	37,293	--	113	--	--	--	2,501	--	5,236	42,792	52,735
Propane	27,500	--	4,141	--	7,992	--	478	--	31,596	7,559	56,537
Normal Butane	5,537	--	-986	--	3,773	--	-8,476	4,830	9,107	2,863	37,507
Isobutane	9,206	--	-435	--	819	--	206	3,986	187	5,211	8,269
Natural Gasoline	9,502	-13	--	--	-2,097	--	-1,357	3,906	68	4,775	10,004
Refinery Olefins	--	--	6,813	76	--	--	1,175	--	--	5,996	8,328
Ethylene	--	--	--	--	--	--	0	--	--	0	0
Propylene	--	--	6,984	--	--	--	-293	--	--	7,559	6,020
Normal Butylene	--	--	-144	76	--	--	1,468	--	--	-1,536	2,308
Isobutylene	--	--	-27	--	--	--	0	--	--	-27	0
Other Liquids	--	4,104	--	19,510	-58,034	6,918	4,723	-48,425	10,566	5,634	138,113
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	4,104	--	171	4,992	2,704	-126	8,625	3,472	0	7,807
Hydrogen	--	--	--	--	--	3,480	--	3,480	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	2,783	--	159	--	-1,127	145	--	1,670	0	1,463
Renewable Fuels (including Fuel Ethanol)	--	1,321	--	--	4,992	362	-271	5,145	1,802	0	6,344
Fuel Ethanol	--	623	--	--	5,030	484	-488	4,837	1,788	0	4,573
Renewable Fuels Except Fuel Ethanol	--	698	--	--	-38	-122	217	308	14	0	1,771
Other Hydrocarbons	--	--	--	12	--	-12	--	--	--	0	--
Unfinished Oils	--	--	--	17,958	1,154	--	3,335	5,355	4,734	5,688	55,455
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	1,381	-64,180	4,214	1,509	-62,454	2,360	0	74,802
Reformulated	--	--	--	--	-12,201	5,829	1,058	-7,452	22	0	11,375
Conventional	--	--	--	1,381	-51,979	-1,615	451	-55,002	2,338	0	63,427
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	5	49	--	-54	49
Finished Petroleum Products	--	--	230,730	4,022	-44,514	-4,279	-885	--	79,035	107,808	104,398
Finished Motor Gasoline	--	--	74,567	--	-3,017	-4,699	151	--	23,893	42,807	8,388
Reformulated	--	--	14,593	--	--	-6,607	--	--	--	7,986	--
Conventional	--	--	59,974	--	-3,017	1,909	151	--	23,893	34,822	8,388
Finished Aviation Gasoline	--	--	363	23	-137	--	15	--	--	234	426
Kerosene-Type Jet Fuel	--	--	26,834	--	-17,844	--	-1,589	--	5,133	5,446	14,276
Kerosene	--	--	121	--	-117	--	243	--	8	-247	389
Distillate Fuel Oil	--	--	85,214	--	-23,681	420	218	--	31,639	30,096	41,735
15 ppm sulfur and under	--	--	76,031	--	-22,555	420	180	--	25,793	27,923	33,759
Greater than 15 ppm to 500 ppm sulfur	--	--	3,508	--	-84	--	-322	--	3,063	683	1,609
Greater than 500 ppm sulfur	--	--	5,675	--	-1,042	--	360	--	2,783	1,490	6,367
Residual Fuel Oil ⁷	--	--	4,059	1,406	458	--	-395	--	3,351	2,967	16,067
Less than 0.31 percent sulfur	--	--	1,296	--	34	--	-195	--	NA	NA	1,406
0.31 to 1.00 percent sulfur	--	--	395	608	--	--	-879	--	NA	NA	2,035
Greater than 1.00 percent sulfur	--	--	2,368	798	424	--	679	--	NA	NA	12,626
Petrochemical Feedstocks	--	--	6,762	164	97	--	124	--	--	6,899	2,625
Naphtha for Petro. Feed. Use	--	--	3,505	164	97	--	56	--	--	3,710	1,733
Other Oils for Petro. Feed. Use	--	--	3,257	--	--	--	68	--	--	3,189	892
Special Naphthas	--	--	924	534	-13	--	-136	--	--	1,581	841
Lubricants	--	--	4,255	1,667	-641	--	710	--	1,995	2,576	9,679
Waxes	--	--	105	40	--	--	27	--	20	98	282
Petroleum Coke	--	--	13,858	188	1,051	--	384	--	12,416	2,297	5,286
Marketable	--	--	10,120	188	1,051	--	384	--	12,416	-1,441	5,286
Catalyst	--	--	3,738	--	--	--	--	--	--	3,738	--
Asphalt and Road Oil	--	--	1,873	--	-665	--	-623	--	507	1,324	3,999
Still Gas	--	--	10,342	--	--	--	--	--	--	10,342	--
Miscellaneous Products	--	--	1,453	--	-6	--	-14	--	73	1,388	405
Total	347,978	4,091	240,376	61,421	-43,323	27,965	-2,312	222,807	235,373	182,640	1,281,859

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

⁷ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 14. PAD District 3 - Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 2019
(Thousand Barrels)

Commodity	Supply						Disposition				
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	Ending Stocks
Crude Oil⁶	2,425,027	--	--	521,283	351,363	189,548	-14,522	2,678,624	823,119	0	865,968
Hydrocarbon Gas Liquids	828,930	-129	131,746	1,084	224,014	--	50,950	94,860	388,507	651,328	173,380
Natural Gas Liquids	828,930	-129	65,310	--	220,692	--	49,974	94,860	388,507	581,462	165,052
Ethane	352,239	--	1,507	--	--	--	9,594	--	45,475	417,739	52,735
Propane	254,289	--	46,214	--	74,400	--	22,334	--	275,212	77,357	56,537
Normal Butane	49,473	--	21,593	--	36,909	--	15,182	23,935	65,833	3,025	37,507
Isobutane	86,439	--	-4,004	--	10,669	--	2,596	38,121	1,589	50,798	8,269
Natural Gasoline	86,490	-129	--	--	-20,348	--	268	32,804	399	32,542	10,004
Refinery Olefins	--	--	66,436	1,084	--	--	976	--	--	69,866	8,328
Ethylene	--	--	--	--	--	--	0	--	--	0	0
Propylene	--	--	68,135	--	--	--	-437	--	--	71,894	6,020
Normal Butylene	--	--	-1,356	1,084	--	--	1,413	--	--	-1,685	2,308
Isobutylene	--	--	-343	--	--	--	0	--	--	-343	0
Other Liquids	--	38,090	--	169,686	-590,628	45,527	5,949	-482,352	115,985	23,093	138,113
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	38,090	--	1,299	54,039	32,939	-403	86,110	40,659	0	7,807
Hydrogen	--	--	--	--	--	37,102	--	37,102	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	25,426	--	1,025	--	-6,239	-84	30	20,266	0	1,463
Renewable Fuels (including Fuel Ethanol)	--	12,664	--	235	54,039	2,115	-319	48,978	20,393	0	6,344
Fuel Ethanol	--	5,906	--	--	53,479	6,542	20	45,803	20,104	0	4,573
Renewable Fuels Except Fuel Ethanol	--	6,758	--	235	559	-4,427	-339	3,175	289	0	1,771
Other Hydrocarbons	--	--	--	39	--	-39	--	--	--	0	--
Unfinished Oils	--	--	--	147,408	5,082	--	10,495	68,050	50,700	23,245	55,455
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	20,979	-649,749	12,588	-4,161	-636,646	24,625	0	74,802
Reformulated	--	--	--	581	-135,925	50,617	-941	-83,944	158	0	11,375
Conventional	--	--	--	20,398	-513,824	-38,029	-3,220	-552,702	24,467	0	63,427
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	18	134	--	-152	49
Finished Petroleum Products	--	--	2,339,969	37,596	-490,682	-12,591	-7,899	--	827,034	1,055,157	104,398
Finished Motor Gasoline	--	--	703,424	785	-51,055	-19,130	-3,263	--	218,411	418,876	8,388
Reformulated	--	--	142,480	--	--	-54,944	0	--	--	87,536	--
Conventional	--	--	560,944	785	-51,055	35,814	-3,263	--	218,411	331,340	8,388
Finished Aviation Gasoline	--	--	3,028	82	-954	--	-9	--	--	2,165	426
Kerosene-Type Jet Fuel	--	--	283,027	30	-170,368	--	-1,161	--	52,354	61,496	14,276
Kerosene	--	--	586	--	-1,021	--	202	--	489	-1,126	389
Distillate Fuel Oil	--	--	882,834	1,813	-271,719	6,539	-1,453	--	351,658	269,262	41,735
15 ppm sulfur and under	--	--	795,248	516	-258,362	6,539	-2,205	--	290,371	255,774	33,759
Greater than 15 ppm to 500 ppm sulfur	--	--	32,583	--	-1,226	--	-73	--	27,891	3,539	1,609
Greater than 500 ppm sulfur	--	--	55,003	1,297	-12,131	--	825	--	33,396	9,948	6,367
Residual Fuel Oil ⁷	--	--	50,768	14,927	7,027	--	-184	--	51,180	21,726	16,067
Less than 0.31 percent sulfur	--	--	12,416	2,480	620	--	506	--	NA	NA	1,406
0.31 to 1.00 percent sulfur	--	--	5,050	1,685	149	--	-504	--	NA	NA	2,035
Greater than 1.00 percent sulfur	--	--	33,302	10,762	6,258	--	-186	--	NA	NA	12,626
Petrochemical Feedstocks	--	--	80,512	3,166	252	--	-129	--	--	84,059	2,625
Naphtha for Petro. Feed. Use	--	--	51,777	3,006	751	--	-149	--	--	55,683	1,733
Other Oils for Petro. Feed. Use	--	--	28,735	160	-499	--	20	--	--	28,376	892
Special Naphthas	--	--	9,095	4,961	-204	--	-337	--	--	14,189	841
Lubricants	--	--	39,954	10,114	-5,723	--	-879	--	25,151	20,073	9,679
Waxes	--	--	978	269	--	--	10	--	248	989	282
Petroleum Coke	--	--	139,893	1,394	6,620	--	390	--	122,012	25,505	5,286
Marketable	--	--	105,056	1,394	6,620	--	390	--	122,012	-9,332	5,286
Catalyst	--	--	34,837	--	--	--	--	--	--	34,837	--
Asphalt and Road Oil	--	--	24,964	55	-3,766	--	-1,097	--	5,175	17,176	3,999
Still Gas	--	--	105,218	--	--	--	--	--	--	105,218	--
Miscellaneous Products	--	--	15,688	--	229	--	11	--	356	15,550	405
Total	3,253,957	37,961	2,471,715	729,649	-505,933	222,484	34,478	2,291,132	2,154,645	1,729,577	1,281,859

-- = Not Applicable.

NA = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

⁷ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 15. PAD District 3 - Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 2019
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil⁶	8,353	--	--	1,220	1,140	817	-22	8,339	3,212	0
Hydrocarbon Gas Liquids	2,872	0	311	2	771	--	-177	410	1,490	2,232
Natural Gas Liquids	2,872	0	91	--	762	--	-214	410	1,490	2,039
Ethane	1,203	--	4	--	--	--	81	--	169	1,380
Propane	887	--	134	--	258	--	15	--	1,019	244
Normal Butane	179	--	-32	--	122	--	-273	156	294	92
Isobutane	297	--	-14	--	26	--	7	129	6	168
Natural Gasoline	307	0	--	--	-68	--	-44	126	2	154
Refinery Olefins	--	--	220	2	--	--	38	--	--	193
Ethylene	--	--	--	--	--	--	0	--	--	0
Propylene	--	--	225	--	9	--	-9	--	--	244
Normal Butylene	--	--	-5	2	--	--	47	--	--	-50
Isobutylene	--	--	-1	--	--	--	0	--	--	-1
Other Liquids	--	132	--	629	-1,872	223	152	-1,562	341	182
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	132	--	6	161	87	-4	278	112	0
Hydrogen	--	--	--	--	--	112	--	112	--	0
Oxygenates (excluding Fuel Ethanol)	--	90	--	5	--	-36	5	--	54	0
Renewable Fuels (including Fuel Ethanol)	--	43	--	--	161	12	-9	166	58	0
Fuel Ethanol	--	20	--	--	162	16	-16	156	58	0
Renewable Fuels Except Fuel Ethanol	--	23	--	--	-1	-4	7	10	0	0
Other Hydrocarbons	--	--	--	0	--	0	--	--	--	0
Unfinished Oils	--	--	--	579	37	--	108	173	153	183
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	45	-2,070	136	49	-2,015	76	0
Reformulated	--	--	--	--	-394	188	34	-240	1	0
Conventional	--	--	--	45	-1,677	-52	15	-1,774	75	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	0	2	--	-2
Finished Petroleum Products	--	--	7,443	130	-1,436	-138	-29	--	2,550	3,478
Finished Motor Gasoline	--	--	2,405	--	-97	-152	5	--	771	1,381
Reformulated	--	--	471	--	--	-213	--	--	--	258
Conventional	--	--	1,935	--	-97	62	5	--	771	1,123
Finished Aviation Gasoline	--	--	12	1	-4	--	0	--	--	8
Kerosene-Type Jet Fuel	--	--	866	--	-576	--	-51	--	166	176
Kerosene	--	--	4	--	-4	--	8	--	0	-8
Distillate Fuel Oil	--	--	2,749	--	-764	14	7	--	1,021	971
15 ppm sulfur and under	--	--	2,453	--	-728	14	6	--	832	901
Greater than 15 ppm to 500 ppm sulfur	--	--	113	--	-3	--	-10	--	99	22
Greater than 500 ppm sulfur	--	--	183	--	-34	--	12	--	90	48
Residual Fuel Oil ⁷	--	--	131	45	15	--	-13	--	108	96
Less than 0.31 percent sulfur	--	--	42	--	1	--	-6	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	13	20	--	--	-28	--	NA	NA
Greater than 1.00 percent sulfur	--	--	76	26	14	--	22	--	NA	NA
Petrochemical Feedstocks	--	--	218	5	3	--	4	--	--	223
Naphtha for Petro. Feed. Use	--	--	113	5	3	--	2	--	--	120
Other Oils for Petro. Feed. Use	--	--	105	--	--	--	2	--	--	103
Special Naphthas	--	--	30	17	0	--	-4	--	--	51
Lubricants	--	--	137	54	-21	--	23	--	64	83
Waxes	--	--	3	1	--	--	1	--	1	3
Petroleum Coke	--	--	447	6	34	--	12	--	401	74
Marketable	--	--	326	6	34	--	12	--	401	-46
Catalyst	--	--	121	--	--	--	--	--	--	121
Asphalt and Road Oil	--	--	60	--	-21	--	-20	--	16	43
Still Gas	--	--	334	--	--	--	--	--	--	334
Miscellaneous Products	--	--	47	--	0	--	0	--	2	45
Total	11,225	132	7,754	1,981	-1,398	902	-75	7,187	7,593	5,892

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

⁷ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 16. PAD District 3 - Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 2019
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil⁶	7,977	--	--	1,715	1,156	624	-48	8,811	2,708	0
Hydrocarbon Gas Liquids	2,727	0	433	4	737	--	168	312	1,278	2,143
Natural Gas Liquids	2,727	0	215	--	726	--	164	312	1,278	1,913
Ethane	1,159	--	5	--	--	--	32	--	150	1,374
Propane	836	--	152	--	245	--	73	--	905	254
Normal Butane	163	--	399	--	121	--	50	79	217	10
Isobutane	284	--	-13	--	35	--	9	125	5	167
Natural Gasoline	285	0	--	--	-67	--	1	108	1	107
Refinery Olefins	--	--	219	4	--	--	3	--	--	230
Ethylene	--	--	--	--	--	--	0	--	--	0
Propylene	--	--	224	--	11	--	-1	--	--	236
Normal Butylene	--	--	-4	4	--	--	5	--	--	-6
Isobutylene	--	--	-1	--	--	--	0	--	--	-1
Other Liquids	--	125	--	558	-1,943	150	20	-1,587	382	76
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	125	--	4	178	108	-1	283	134	0
Hydrogen	--	--	--	--	--	122	--	122	--	0
Oxygenates (excluding Fuel Ethanol)	--	84	--	3	--	-21	0	0	67	0
Renewable Fuels (including Fuel Ethanol)	--	42	--	1	178	7	-1	161	67	0
Fuel Ethanol	--	19	--	--	176	22	0	151	66	0
Renewable Fuels Except Fuel Ethanol	--	22	--	1	2	-15	-1	10	1	0
Other Hydrocarbons	--	--	--	0	--	0	--	--	--	0
Unfinished Oils	--	--	--	485	17	--	35	224	167	76
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	69	-2,137	41	-14	-2,094	81	0
Reformulated	--	--	--	2	-447	167	-3	-276	1	0
Conventional	--	--	--	67	-1,690	-125	-11	-1,818	80	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	0	0	--	-1
Finished Petroleum Products	--	--	7,697	124	-1,614	-41	-26	--	2,721	3,471
Finished Motor Gasoline	--	--	2,314	3	-168	-63	-11	--	718	1,378
Reformulated	--	--	469	--	--	-181	0	--	--	288
Conventional	--	--	1,845	3	-168	118	-11	--	718	1,090
Finished Aviation Gasoline	--	--	10	0	-3	--	0	--	--	7
Kerosene-Type Jet Fuel	--	--	931	0	-560	--	-4	--	172	202
Kerosene	--	--	2	--	-3	--	1	--	2	-4
Distillate Fuel Oil	--	--	2,904	6	-894	22	-5	--	1,157	886
15 ppm sulfur and under	--	--	2,616	2	-850	22	-7	--	955	841
Greater than 15 ppm to 500 ppm sulfur	--	--	107	--	-4	--	0	--	92	12
Greater than 500 ppm sulfur	--	--	181	4	-40	--	3	--	110	33
Residual Fuel Oil ⁷	--	--	167	49	23	--	-1	--	168	71
Less than 0.31 percent sulfur	--	--	41	8	2	--	2	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	17	6	0	--	-2	--	NA	NA
Greater than 1.00 percent sulfur	--	--	110	35	21	--	-1	--	NA	NA
Petrochemical Feedstocks	--	--	265	10	1	--	0	--	--	277
Naphtha for Petro. Feed. Use	--	--	170	10	2	--	0	--	--	183
Other Oils for Petro. Feed. Use	--	--	95	1	-2	--	0	--	--	93
Special Naphthas	--	--	30	16	-1	--	-1	--	--	47
Lubricants	--	--	131	33	-19	--	-3	--	83	66
Waxes	--	--	3	1	--	--	0	--	1	3
Petroleum Coke	--	--	460	5	22	--	1	--	401	84
Marketable	--	--	346	5	22	--	1	--	401	-31
Catalyst	--	--	115	--	--	--	--	--	--	115
Asphalt and Road Oil	--	--	82	0	-12	--	-4	--	17	56
Still Gas	--	--	346	--	--	--	--	--	--	346
Miscellaneous Products	--	--	52	--	1	--	0	--	1	51
Total	10,704	125	8,131	2,400	-1,664	732	113	7,537	7,088	5,689

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

⁷ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 17. PAD District 4 - Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, October 2019
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	
Crude Oil	31,271	--	--	11,961	-21,146	-2,803	2,412	16,870	0	0	23,044
Hydrocarbon Gas Liquids	13,886	-11	102	458	-10,186	--	-88	590	87	3,660	4,876
Natural Gas Liquids	13,886	-11	61	458	-10,186	--	-139	590	87	3,670	4,741
Ethane	3,385	--	--	--	--	--	-8	--	--	546	495
Propane	5,180	--	240	317	-3,618	--	-7	--	1	2,125	1,775
Normal Butane	2,059	--	-131	110	-1,394	--	-137	211	--	570	1,816
Isobutane	1,029	--	-48	31	-767	--	26	170	0	49	284
Natural Gasoline	2,233	-11	--	--	-1,560	--	-13	209	86	380	371
Refinery Olefins	--	--	41	--	--	--	51	--	--	-10	135
Ethylene	--	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	8	--	--	--	0	--	--	8	0
Normal Butylene	--	--	33	--	--	--	51	--	--	-18	135
Isobutylene	--	--	--	--	--	--	0	--	--	0	0
Other Liquids	--	429	--	96	615	-1,263	-195	-69	--	141	9,250
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	429	--	38	371	346	19	1,165	--	0	430
Hydrogen	--	--	--	--	--	201	--	201	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	--	--	--	--	--	--
Renewable Fuels (including Fuel Ethanol)	--	429	--	38	371	145	19	964	--	0	430
Fuel Ethanol	--	429	--	--	346	163	14	924	--	0	353
Renewable Fuels Except Fuel Ethanol	--	0	--	38	25	-18	5	40	--	0	77
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	--	--	--	529	-670	--	141	3,589
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	58	244	-1,609	-743	-564	--	0	5,231
Reformulated	--	--	--	--	--	--	--	--	--	--	--
Conventional	--	--	--	--	244	-1,609	-743	-564	--	0	5,231
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	18,016	232	-726	1,473	-1,743	--	40	20,699	6,907
Finished Motor Gasoline	--	--	9,248	7	-534	1,446	-242	--	--	10,409	1,435
Reformulated	--	--	--	--	--	--	--	--	--	--	--
Conventional	--	--	9,248	7	-534	1,446	-242	--	--	10,409	1,435
Finished Aviation Gasoline	--	--	3	--	--	--	-3	--	--	6	7
Kerosene-Type Jet Fuel	--	--	1,005	--	644	--	-201	--	--	1,850	547
Kerosene	--	--	--	--	--	--	-1	--	--	1	1
Distillate Fuel Oil	--	--	5,195	174	210	27	-1,095	--	26	6,675	3,151
15 ppm sulfur and under	--	--	4,993	174	210	27	-1,195	--	--	6,599	2,826
Greater than 15 ppm to 500 ppm sulfur	--	--	139	--	--	--	37	--	26	76	221
Greater than 500 ppm sulfur	--	--	63	--	--	--	63	--	--	0	104
Residual Fuel Oil ⁶	--	--	360	--	--	--	-20	--	5	375	209
Less than 0.31 percent sulfur	--	--	207	--	--	--	0	--	NA	NA	32
0.31 to 1.00 percent sulfur	--	--	36	--	--	--	-1	--	NA	NA	5
Greater than 1.00 percent sulfur	--	--	117	--	--	--	-19	--	NA	NA	172
Petrochemical Feedstocks	--	--	--	--	--	--	--	--	--	--	--
Naphtha for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--	--
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	--	--	--	--	--	--	--	--	--
Lubricants	--	--	--	--	--	--	--	--	6	-6	--
Waxes	--	--	--	--	--	--	--	--	0	0	--
Petroleum Coke	--	--	619	--	-554	--	0	--	0	64	161
Marketable	--	--	421	--	-554	--	0	--	0	-134	161
Catalyst	--	--	198	--	--	--	--	--	--	198	--
Asphalt and Road Oil	--	--	900	50	-491	--	-179	--	3	635	1,376
Still Gas	--	--	577	--	--	--	--	--	--	577	--
Miscellaneous Products	--	--	109	1	--	--	-2	--	0	112	20
Total	45,157	418	18,118	12,747	-31,443	-2,593	386	17,391	127	24,500	44,077

-- = Not Applicable.

- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 18. PAD District 4 - Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 2019
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	
Crude Oil	287,800	--	--	116,977	-191,409	-19,954	1,504	191,909	0	0	23,044
Hydrocarbon Gas Liquids	130,867	-102	3,371	3,641	-105,603	--	1,416	5,615	1,922	23,221	4,876
Natural Gas Liquids	130,867	-102	2,850	3,641	-105,603	--	1,318	5,615	1,922	22,798	4,741
Ethane	33,587	--	--	--	--	--	30	--	0	2,705	495
Propane	48,364	--	2,592	2,924	-36,969	--	379	--	4	16,528	1,775
Normal Butane	18,906	--	399	533	-14,584	--	873	1,905	49	2,427	1,816
Isobutane	9,452	--	-141	184	-8,011	--	17	2,000	0	-533	284
Natural Gasoline	20,558	-102	--	--	-15,187	--	19	1,710	1,869	1,671	371
Refinery Olefins	--	--	521	--	--	--	98	--	--	423	135
Ethylene	--	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	40	--	--	--	-1	--	--	41	0
Normal Butylene	--	--	502	--	--	--	104	--	--	398	135
Isobutylene	--	--	-21	--	--	--	-5	--	--	-16	0
Other Liquids	--	4,004	--	1,438	5,884	-10,909	-388	-1,304	25	2,084	9,250
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	4,004	--	179	3,994	3,479	-37	11,688	5	0	430
Hydrogen	--	--	--	--	--	2,028	--	2,028	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	--	--	0	0	--
Renewable Fuels (including Fuel Ethanol)	--	4,004	--	179	3,994	1,451	-37	9,660	5	0	430
Fuel Ethanol	--	4,004	--	--	3,455	1,688	0	9,147	0	0	353
Renewable Fuels Except Fuel Ethanol	--	0	--	179	539	-237	-37	513	5	0	77
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	--	--	--	92	-2,195	19	2,084	3,589
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	1,259	1,890	-14,388	-443	-10,797	1	0	5,231
Reformulated	--	--	--	--	--	--	--	--	--	--	--
Conventional	--	--	--	--	1,890	-14,388	-443	-10,797	1	0	5,231
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	200,774	1,694	-8,876	12,902	-2,069	--	240	208,323	6,907
Finished Motor Gasoline	--	--	95,405	72	-5,658	12,700	-178	--	9	102,688	1,435
Reformulated	--	--	--	--	--	--	--	--	--	--	--
Conventional	--	--	95,405	72	-5,658	12,700	-178	--	9	102,688	1,435
Finished Aviation Gasoline	--	--	54	17	--	--	-3	--	--	74	7
Kerosene-Type Jet Fuel	--	--	10,329	--	7,933	--	-267	--	--	18,529	547
Kerosene	--	--	1	--	--	--	-1	--	--	2	1
Distillate Fuel Oil	--	--	64,058	1,188	-1,295	201	-1,293	--	53	65,393	3,151
15 ppm sulfur and under	--	--	63,520	1,188	-1,295	201	-1,331	--	15	64,931	2,826
Greater than 15 ppm to 500 ppm sulfur	--	--	522	--	--	--	20	--	38	464	221
Greater than 500 ppm sulfur	--	--	16	--	--	--	18	--	--	-2	104
Residual Fuel Oil ⁶	--	--	3,739	97	--	--	-27	--	77	3,786	209
Less than 0.31 percent sulfur	--	--	1,895	--	--	--	7	--	NA	NA	32
0.31 to 1.00 percent sulfur	--	--	279	--	--	--	-3	--	NA	NA	5
Greater than 1.00 percent sulfur	--	--	1,565	97	--	--	-31	--	NA	NA	172
Petrochemical Feedstocks	--	--	--	--	--	--	--	--	--	--	--
Naphtha for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--	--
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	--	--	--	--	--	--	--	--	--
Lubricants	--	--	--	1	--	--	--	--	69	-68	--
Waxes	--	--	--	--	--	--	--	--	2	-2	--
Petroleum Coke	--	--	7,574	--	-3,704	--	-33	--	1	3,902	161
Marketable	--	--	5,305	--	-3,704	--	-33	--	1	1,633	161
Catalyst	--	--	2,269	--	--	--	--	--	--	2,269	--
Asphalt and Road Oil	--	--	11,777	309	-6,151	--	-271	--	25	6,181	1,376
Still Gas	--	--	6,777	--	--	--	--	--	--	6,777	--
Miscellaneous Products	--	--	1,060	10	--	--	4	--	4	1,062	20
Total	418,667	3,902	204,145	123,750	-300,004	-17,962	463	196,220	2,187	233,629	44,077

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 19. PAD District 4 - Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 2019
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil	1,009	--	--	386	-682	-90	78	544	0	0
Hydrocarbon Gas Liquids	448	0	3	15	-329	--	-3	19	3	118
Natural Gas Liquids	448	0	2	15	-329	--	-4	19	3	118
Ethane	109	--	--	--	--	--	0	--	--	18
Propane	167	--	8	10	-117	--	0	--	0	69
Normal Butane	66	--	-4	4	-45	--	-4	7	--	18
Isobutane	33	--	-2	1	-25	--	1	5	0	2
Natural Gasoline	72	0	--	--	-50	--	0	7	3	12
Refinery Olefins	--	--	1	--	--	--	2	--	--	0
Ethylene	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	0	--	--	--	0	--	--	0
Normal Butylene	--	--	1	--	--	--	2	--	--	-1
Isobutylene	--	--	--	--	--	--	0	--	--	0
Other Liquids	--	14	--	3	20	-41	-6	-2	--	5
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	14	--	1	12	11	1	38	--	0
Hydrogen	--	--	--	--	--	6	--	6	--	0
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	--	--	--	--	--
Renewable Fuels (including Fuel Ethanol)	--	14	--	1	12	5	1	31	--	0
Fuel Ethanol	--	14	--	--	11	5	0	30	--	0
Renewable Fuels Except Fuel Ethanol	--	0	--	1	1	-1	0	1	--	0
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	--	--	--	17	-22	--	5
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	2	8	-52	-24	-18	--	0
Reformulated	--	--	--	--	--	--	--	--	--	--
Conventional	--	--	--	--	8	-52	-24	-18	--	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	581	7	-23	48	-56	--	1	668
Finished Motor Gasoline	--	--	298	0	-17	47	-8	--	--	336
Reformulated	--	--	--	--	--	--	--	--	--	--
Conventional	--	--	298	0	-17	47	-8	--	--	336
Finished Aviation Gasoline	--	--	0	--	--	--	0	--	--	0
Kerosene-Type Jet Fuel	--	--	32	--	21	--	-6	--	--	60
Kerosene	--	--	--	--	--	--	0	--	--	0
Distillate Fuel Oil	--	--	168	6	7	1	-35	--	1	215
15 ppm sulfur and under	--	--	161	6	7	1	-39	--	--	213
Greater than 15 ppm to 500 ppm sulfur	--	--	4	--	--	--	1	--	1	2
Greater than 500 ppm sulfur	--	--	2	--	--	--	2	--	--	0
Residual Fuel Oil ⁶	--	--	12	--	--	--	-1	--	0	12
Less than 0.31 percent sulfur	--	--	7	--	--	--	0	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	1	--	--	--	0	--	NA	NA
Greater than 1.00 percent sulfur	--	--	4	--	--	--	-1	--	NA	NA
Petrochemical Feedstocks	--	--	--	--	--	--	--	--	--	--
Naphtha for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	--	--	--	--	--	--	--	--
Lubricants	--	--	--	--	--	--	--	--	0	0
Waxes	--	--	--	--	--	--	--	--	0	0
Petroleum Coke	--	--	20	--	-18	--	0	--	0	2
Marketable	--	--	14	--	-18	--	0	--	0	-4
Catalyst	--	--	6	--	--	--	--	--	--	6
Asphalt and Road Oil	--	--	29	2	-16	--	-6	--	0	20
Still Gas	--	--	19	--	--	--	--	--	--	19
Miscellaneous Products	--	--	4	0	--	--	0	--	0	4
Total	1,457	13	584	411	-1,014	-84	12	561	4	790

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 20. PAD District 4 - Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 2019
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil	947	--	--	385	-630	-66	5	631	0	0
Hydrocarbon Gas Liquids	430	0	11	12	-347	--	5	18	6	76
Natural Gas Liquids	430	0	9	12	-347	--	4	18	6	75
Ethane	110	--	--	--	--	--	0	--	0	9
Propane	159	--	9	10	-122	--	1	--	0	54
Normal Butane	62	--	1	2	-48	--	3	6	0	8
Isobutane	31	--	0	1	-26	--	0	7	0	-2
Natural Gasoline	68	0	--	--	-50	--	0	6	6	5
Refinery Olefins	--	--	2	--	--	--	0	--	--	1
Ethylene	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	0	--	--	--	0	--	--	0
Normal Butylene	--	--	2	--	--	--	0	--	--	1
Isobutylene	--	--	0	--	--	--	0	--	--	0
Other Liquids	--	13	--	5	19	-36	-1	-4	0	7
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	13	--	1	13	11	0	38	0	0
Hydrogen	--	--	--	--	--	7	--	7	--	0
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	--	--	0	0
Renewable Fuels (including Fuel Ethanol)	--	13	--	1	13	5	0	32	0	0
Fuel Ethanol	--	13	--	--	11	6	0	30	0	0
Renewable Fuels Except Fuel Ethanol	--	0	--	1	2	-1	0	2	0	0
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	--	--	--	0	-7	0	7
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	4	6	-47	-1	-36	0	0
Reformulated	--	--	--	--	--	--	--	--	--	--
Conventional	--	--	--	--	6	-47	-1	-36	0	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	660	6	-29	42	-7	--	1	685
Finished Motor Gasoline	--	--	314	0	-19	42	-1	--	0	338
Reformulated	--	--	--	--	--	--	--	--	--	--
Conventional	--	--	314	0	-19	42	-1	--	0	338
Finished Aviation Gasoline	--	--	0	0	--	--	0	--	--	0
Kerosene-Type Jet Fuel	--	--	34	--	26	--	-1	--	--	61
Kerosene	--	--	0	--	--	--	0	--	--	0
Distillate Fuel Oil	--	--	211	4	-4	1	-4	--	0	215
15 ppm sulfur and under	--	--	209	4	-4	1	-4	--	0	214
Greater than 15 ppm to 500 ppm sulfur	--	--	2	--	--	--	0	--	0	2
Greater than 500 ppm sulfur	--	--	0	--	--	--	0	--	--	0
Residual Fuel Oil ⁶	--	--	12	0	--	--	0	--	0	12
Less than 0.31 percent sulfur	--	--	6	--	--	--	0	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	1	--	--	--	0	--	NA	NA
Greater than 1.00 percent sulfur	--	--	5	0	--	--	0	--	NA	NA
Petrochemical Feedstocks	--	--	--	--	--	--	--	--	--	--
Naphtha for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	--	--	--	--	--	--	--	--
Lubricants	--	--	--	0	--	--	--	--	0	0
Waxes	--	--	--	--	--	--	--	--	0	0
Petroleum Coke	--	--	25	--	-12	--	0	--	0	13
Marketable	--	--	17	--	-12	--	0	--	0	5
Catalyst	--	--	7	--	--	--	--	--	--	7
Asphalt and Road Oil	--	--	39	1	-20	--	-1	--	0	20
Still Gas	--	--	22	--	--	--	--	--	--	22
Miscellaneous Products	--	--	3	0	--	--	0	--	0	3
Total	1,377	13	672	407	-987	-59	2	645	7	769

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 21. PAD District 5 - Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, October 2019
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	
Crude Oil	28,491	--	--	42,824	5,775	2,585	4,767	74,825	84	0	51,006
Hydrocarbon Gas Liquids	1,558	-13	1,269	1,815	1,097	--	289	2,217	1,308	1,912	6,535
Natural Gas Liquids	1,558	-13	1,187	1,815	1,097	--	299	2,217	1,308	1,820	6,418
Ethane	1	--	--	--	--	--	--	--	0	1	--
Propane	285	--	1,085	1,047	533	--	-28	--	819	2,159	2,512
Normal Butane	235	--	-52	753	363	--	389	788	483	-361	3,444
Isobutane	332	--	154	15	201	--	-57	805	--	-46	416
Natural Gasoline	705	-13	--	--	--	--	-5	624	6	67	46
Refinery Olefins	--	--	82	--	--	--	-10	--	--	92	117
Ethylene	--	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	139	--	--	--	-2	--	--	141	11
Normal Butylene	--	--	-57	--	--	--	-8	--	--	-49	106
Isobutylene	--	--	--	--	--	--	0	--	--	0	0
Other Liquids	--	765	--	4,729	9,596	-1,862	892	10,978	533	824	49,431
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	765	--	1,244	4,790	-70	-197	6,729	197	0	4,601
Hydrogen	--	--	--	--	--	1,293	--	1,293	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	--	--	0	0	--
Renewable Fuels (including Fuel Ethanol)	--	765	--	1,244	4,790	-1,363	-197	5,436	197	0	4,601
Fuel Ethanol	--	505	--	522	4,387	-559	-239	4,923	171	0	2,850
Renewable Fuels Except Fuel Ethanol	--	260	--	722	403	-804	42	513	26	0	1,751
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	2,536	--	--	838	613	261	824	19,992
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	949	4,806	-1,792	251	3,636	76	0	24,838
Reformulated	--	--	--	--	2,254	34	197	2,091	0	0	11,540
Conventional	--	--	--	949	2,552	-1,827	54	1,545	75	0	13,298
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	92,277	5,255	2,142	2,554	-2,964	--	11,446	93,746	31,411
Finished Motor Gasoline	--	--	48,977	964	333	2,351	345	--	1,035	51,246	2,583
Reformulated	--	--	34,415	--	--	424	3	--	--	34,836	16
Conventional	--	--	14,562	964	333	1,927	342	--	1,035	16,410	2,567
Finished Aviation Gasoline	--	--	--	3	--	--	-31	--	--	34	121
Kerosene-Type Jet Fuel	--	--	13,245	3,438	257	--	-436	--	820	16,556	8,993
Kerosene	--	--	6	--	--	--	3	--	16	-13	46
Distillate Fuel Oil	--	--	16,487	468	975	203	-1,685	--	4,629	15,189	11,133
15 ppm sulfur and under	--	--	15,496	467	975	203	-1,783	--	2,198	16,726	10,136
Greater than 15 ppm to 500 ppm sulfur	--	--	369	--	--	--	85	--	480	-196	262
Greater than 500 ppm sulfur	--	--	622	1	--	--	13	--	1,951	-1,341	735
Residual Fuel Oil ⁶	--	--	4,086	189	--	--	-499	--	1,005	3,769	4,571
Less than 0.31 percent sulfur	--	--	9	--	--	--	7	--	NA	NA	187
0.31 to 1.00 percent sulfur	--	--	305	123	--	--	-181	--	NA	NA	244
Greater than 1.00 percent sulfur	--	--	3,772	66	--	--	-322	--	NA	NA	4,134
Petrochemical Feedstocks	--	--	2	35	--	--	1	--	--	36	7
Naphtha for Petro. Feed. Use	--	--	2	35	--	--	1	--	--	36	7
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	22	--	--	--	-7	--	--	29	36
Lubricants	--	--	455	25	--	--	-62	--	330	212	604
Waxes	--	--	--	56	--	--	--	--	7	49	--
Petroleum Coke	--	--	4,396	29	111	--	-230	--	3,564	1,202	1,473
Marketable	--	--	3,313	29	111	--	-230	--	3,564	119	1,473
Catalyst	--	--	1,083	--	--	--	--	--	--	1,083	--
Asphalt and Road Oil	--	--	828	48	466	--	-347	--	41	1,648	1,778
Still Gas	--	--	3,332	--	--	--	--	--	--	3,332	--
Miscellaneous Products	--	--	441	--	--	--	-16	--	0	457	66
Total	30,049	752	93,546	54,623	18,610	3,278	2,984	88,020	13,371	96,482	138,383

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biogiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 22. PAD District 5 - Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-October 2019
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	
Crude Oil	280,010	--	--	386,911	54,513	21,067	5,860	730,180	6,462	0	51,006
Hydrocarbon Gas Liquids	16,541	-112	16,800	16,252	8,601	--	2,976	22,340	14,713	18,053	6,535
Natural Gas Liquids	16,541	-112	16,082	16,252	8,601	--	2,909	22,340	14,713	17,402	6,418
Ethane	15	--	--	--	--	--	--	--	3	12	--
Propane	2,927	--	10,253	10,125	3,442	--	1,099	--	9,003	16,645	2,512
Normal Butane	2,483	--	4,596	5,644	3,613	--	1,786	7,956	5,514	1,080	3,444
Isobutane	3,611	--	1,233	483	1,546	--	12	7,747	6	-892	416
Natural Gasoline	7,505	-112	--	--	--	--	12	6,637	187	557	46
Refinery Olefins	--	--	718	--	--	--	67	--	--	651	117
Ethylene	--	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	1,441	--	--	--	-1	--	--	1,442	11
Normal Butylene	--	--	-723	--	--	--	68	--	--	-791	106
Isobutylene	--	--	--	--	--	--	0	--	--	0	0
Other Liquids	--	7,815	--	49,022	92,120	-7,937	-2,286	134,781	5,644	2,881	49,431
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	7,815	--	9,370	45,392	6,200	-360	66,404	2,734	0	4,601
Hydrogen	--	--	--	--	--	12,329	--	12,329	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	5	--	--	5	0	--
Renewable Fuels (including Fuel Ethanol)	--	7,815	--	9,370	45,392	-6,134	-360	54,075	2,729	0	4,601
Fuel Ethanol	--	5,064	--	3,986	41,618	-940	-322	48,054	1,996	0	2,850
Renewable Fuels Except Fuel Ethanol	--	2,751	--	5,384	3,774	-5,194	-38	6,021	733	0	1,751
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	26,789	--	--	542	21,584	1,782	2,881	19,992
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	12,863	46,728	-14,138	-2,468	46,793	1,128	0	24,838
Reformulated	--	--	--	2,255	22,531	5,068	-1,224	31,063	15	0	11,540
Conventional	--	--	--	10,608	24,197	-19,206	-1,244	15,730	1,113	0	13,298
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	924,515	50,924	21,341	16,240	-4,480	--	106,779	910,720	31,411
Finished Motor Gasoline	--	--	479,848	4,915	4,334	15,078	499	--	11,280	492,396	2,583
Reformulated	--	--	338,461	--	--	-2,320	2	--	--	336,139	16
Conventional	--	--	141,387	4,915	4,334	17,398	497	--	11,280	156,257	2,567
Finished Aviation Gasoline	--	--	287	33	--	--	-94	--	--	414	121
Kerosene-Type Jet Fuel	--	--	136,189	33,875	2,790	--	-929	--	7,390	166,393	8,993
Kerosene	--	--	58	--	--	--	-27	--	26	59	46
Distillate Fuel Oil	--	--	174,784	4,156	9,119	1,162	-2,716	--	40,339	151,598	11,133
15 ppm sulfur and under	--	--	167,317	4,146	9,119	1,162	-2,727	--	26,200	158,270	10,136
Greater than 15 ppm to 500 ppm sulfur	--	--	2,923	--	--	--	18	--	5,054	-2,149	262
Greater than 500 ppm sulfur	--	--	4,544	10	--	--	-7	--	9,085	-4,524	735
Residual Fuel Oil ⁶	--	--	36,205	5,296	--	--	57	--	9,194	32,250	4,571
Less than 0.31 percent sulfur	--	--	57	338	--	--	-75	--	NA	NA	187
0.31 to 1.00 percent sulfur	--	--	3,346	1,929	--	--	-223	--	NA	NA	244
Greater than 1.00 percent sulfur	--	--	32,802	3,029	--	--	355	--	NA	NA	4,134
Petrochemical Feedstocks	--	--	22	304	--	--	2	--	--	324	7
Naphtha for Petro. Feed. Use	--	--	22	304	--	--	2	--	--	324	7
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	290	--	--	--	-21	--	--	311	36
Lubricants	--	--	5,049	583	-321	--	-665	--	3,034	2,942	604
Waxes	--	--	--	536	--	--	--	--	54	482	--
Petroleum Coke	--	--	44,805	256	-106	--	2	--	34,902	10,050	1,473
Marketable	--	--	34,653	256	-106	--	2	--	34,902	-102	1,473
Catalyst	--	--	10,152	--	--	--	--	--	--	10,152	--
Asphalt and Road Oil	--	--	7,986	970	5,525	--	-555	--	559	14,477	1,778
Still Gas	--	--	34,964	--	--	--	--	--	--	34,964	--
Miscellaneous Products	--	--	4,028	--	--	--	-33	--	3	4,058	66
Total	296,551	7,703	941,315	503,109	176,575	29,369	2,070	887,301	133,598	931,654	138,383

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biogiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Supply Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 23. PAD District 5 - Daily Average Supply and Disposition of Crude Oil and Petroleum Products, October 2019
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil	919	--	--	1,381	186	83	154	2,414	3	0
Hydrocarbon Gas Liquids	50	0	41	59	35	--	9	72	42	62
Natural Gas Liquids	50	0	38	59	35	--	10	72	42	59
Ethane	0	--	--	--	--	--	--	--	0	0
Propane	9	--	35	34	17	--	-1	--	26	70
Normal Butane	8	--	-2	24	12	--	13	25	16	-12
Isobutane	11	--	5	0	6	--	-2	26	--	-1
Natural Gasoline	23	0	--	--	--	--	0	20	0	2
Refinery Olefins	--	--	3	--	--	--	0	--	--	3
Ethylene	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	4	--	--	--	0	--	--	5
Normal Butylene	--	--	-2	--	--	--	0	--	--	-2
Isobutylene	--	--	--	--	--	--	0	--	--	0
Other Liquids	--	25	--	153	310	-60	29	354	17	27
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	25	--	40	155	-2	-6	217	6	0
Hydrogen	--	--	--	--	--	42	--	42	--	0
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	--	--	0	0
Renewable Fuels (including Fuel Ethanol)	--	25	--	40	155	-44	-6	175	6	0
Fuel Ethanol	--	16	--	17	142	-18	-8	159	6	0
Renewable Fuels Except Fuel Ethanol	--	8	--	23	13	-26	1	17	1	0
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	82	--	--	27	20	8	27
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	31	155	-58	8	117	2	0
Reformulated	--	--	--	--	73	1	6	67	0	0
Conventional	--	--	--	31	82	-59	2	50	2	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	2,977	170	69	82	-96	--	369	3,024
Finished Motor Gasoline	--	--	1,580	31	11	76	11	--	33	1,653
Reformulated	--	--	1,110	--	--	14	0	--	--	1,124
Conventional	--	--	470	31	11	62	11	--	33	529
Finished Aviation Gasoline	--	--	--	0	--	--	-1	--	--	1
Kerosene-Type Jet Fuel	--	--	427	111	8	--	-14	--	26	534
Kerosene	--	--	0	--	--	--	0	--	1	0
Distillate Fuel Oil	--	--	532	15	31	7	-54	--	149	490
15 ppm sulfur and under	--	--	500	15	31	7	-58	--	71	540
Greater than 15 ppm to 500 ppm sulfur	--	--	12	--	--	--	3	--	15	-6
Greater than 500 ppm sulfur	--	--	20	0	--	--	0	--	63	-43
Residual Fuel Oil ⁶	--	--	132	6	--	--	-16	--	32	122
Less than 0.31 percent sulfur	--	--	0	--	--	--	0	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	10	4	--	--	-6	--	NA	NA
Greater than 1.00 percent sulfur	--	--	122	2	--	--	-10	--	NA	NA
Petrochemical Feedstocks	--	--	0	1	--	--	0	--	--	1
Naphtha for Petro. Feed. Use	--	--	0	1	--	--	0	--	--	1
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	1	--	--	--	0	--	--	1
Lubricants	--	--	15	1	--	--	-2	--	11	7
Waxes	--	--	--	2	--	--	--	--	0	2
Petroleum Coke	--	--	142	1	4	--	-7	--	115	39
Marketable	--	--	107	1	4	--	-7	--	115	4
Catalyst	--	--	35	--	--	--	--	--	--	35
Asphalt and Road Oil	--	--	27	2	15	--	-11	--	1	53
Still Gas	--	--	107	--	--	--	--	--	--	107
Miscellaneous Products	--	--	14	--	--	--	-1	--	0	15
Total	969	24	3,018	1,762	600	106	96	2,839	431	3,112

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 24. PAD District 5 - Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-October 2019
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil	921	--	--	1,273	179	69	19	2,402	21	0
Hydrocarbon Gas Liquids	54	0	55	53	28	--	10	73	48	59
Natural Gas Liquids	54	0	53	53	28	--	10	73	48	57
Ethane	0	--	--	--	--	--	--	--	0	0
Propane	10	--	34	33	11	--	4	--	30	55
Normal Butane	8	--	15	19	12	--	6	26	18	4
Isobutane	12	--	4	2	5	--	0	25	0	-3
Natural Gasoline	25	0	--	--	--	--	0	22	1	2
Refinery Olefins	--	--	2	--	--	--	0	--	--	2
Ethylene	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	5	--	--	--	0	--	--	5
Normal Butylene	--	--	-2	--	--	--	0	--	--	-3
Isobutylene	--	--	--	--	--	--	0	--	--	0
Other Liquids	--	26	--	161	303	-26	-8	443	19	9
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	26	--	31	149	20	-1	218	9	0
Hydrogen	--	--	--	--	--	41	--	41	--	0
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	--	--	0	0
Renewable Fuels (including Fuel Ethanol)	--	26	--	31	149	-20	-1	178	9	0
Fuel Ethanol	--	17	--	13	137	-3	-1	158	7	0
Renewable Fuels Except Fuel Ethanol	--	9	--	18	12	-17	0	20	2	0
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	88	--	--	2	71	6	9
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	42	154	-47	-8	154	4	0
Reformulated	--	--	--	7	74	17	-4	102	0	0
Conventional	--	--	--	35	80	-63	-4	52	4	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	3,041	168	70	53	-15	--	351	2,996
Finished Motor Gasoline	--	--	1,578	16	14	50	2	--	37	1,620
Reformulated	--	--	1,113	--	--	-8	0	--	--	1,106
Conventional	--	--	465	16	14	57	2	--	37	514
Finished Aviation Gasoline	--	--	1	0	--	--	0	--	--	1
Kerosene-Type Jet Fuel	--	--	448	111	9	--	-3	--	24	547
Kerosene	--	--	0	--	--	--	0	--	0	0
Distillate Fuel Oil	--	--	575	14	30	4	-9	--	133	499
15 ppm sulfur and under	--	--	550	14	30	4	-9	--	86	521
Greater than 15 ppm to 500 ppm sulfur	--	--	10	--	--	--	0	--	17	-7
Greater than 500 ppm sulfur	--	--	15	0	--	--	0	--	30	-15
Residual Fuel Oil ⁶	--	--	119	17	--	--	0	--	30	106
Less than 0.31 percent sulfur	--	--	0	1	--	--	0	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	11	6	--	--	-1	--	NA	NA
Greater than 1.00 percent sulfur	--	--	108	10	--	--	1	--	NA	NA
Petrochemical Feedstocks	--	--	0	1	--	--	0	--	--	1
Naphtha for Petro. Feed. Use	--	--	0	1	--	--	0	--	--	1
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	1	--	--	--	0	--	--	1
Lubricants	--	--	17	2	-1	--	-2	--	10	10
Waxes	--	--	--	2	--	--	--	--	0	2
Petroleum Coke	--	--	147	1	0	--	0	--	115	33
Marketable	--	--	114	1	0	--	0	--	115	0
Catalyst	--	--	33	--	--	--	--	--	--	33
Asphalt and Road Oil	--	--	26	3	18	--	-2	--	2	48
Still Gas	--	--	115	--	--	--	--	--	--	115
Miscellaneous Products	--	--	13	--	--	--	0	--	0	13
Total	975	25	3,096	1,655	581	97	7	2,919	439	3,065

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 25. Crude Oil Supply, Disposition, and Ending Stocks by PAD District, October 2019
(Thousand Barrels, Except Where Noted)

Process	PAD Districts					U.S. Total	
	1	2	3	4	5	Total	Daily Average
Supply							
Field Production	2,390	71,214	258,940	31,271	28,491	392,305	12,655
Alaskan	--	--	--	--	--	14,718	475
Lower 48 States	--	--	--	--	--	377,587	12,180
Imports (PAD District of Entry)	16,372	84,574	37,813	11,961	42,824	193,544	6,243
Commercial	16,372	84,574	37,813	11,961	42,824	193,544	6,243
Strategic Petroleum Reserve (SPR)	--	--	--	--	--	--	--
Net Receipts	6,663	-26,626	35,334	-21,146	5,775	--	--
Adjustments ¹	-1,815	-4,057	25,326	-2,803	2,585	19,237	621
Disposition							
Stock Change ²	965	6,646	-677	2,412	4,767	14,113	455
Commercial	--	--	2,988	--	--	17,778	573
SPR	--	--	-3,665	--	--	-3,665	-118
Refinery Inputs	22,644	113,258	258,510	16,870	74,825	486,107	15,681
Exports	1	5,201	99,579	0	84	104,866	3,383
Ending Stocks							
Total	10,744	134,625	865,968	23,044	51,006	1,085,387	--
Commercial	10,744	134,625	224,815	23,044	51,006	444,234	--
Refinery	7,699	13,418	46,014	2,925	22,036	92,092	--
Tank Farms and Pipelines	3,045	121,207	178,801	20,119	25,212	348,384	--
Cushing, Oklahoma	--	47,400	--	--	--	47,400	--
Lease	--	--	--	--	--	--	--
Alaskan Crude Oil In-Transit by Water	--	--	--	--	3,758	3,758	--
SPR	--	--	641,153	--	--	641,153	--
SPR Stocks							
Percent of Total Crude Oil Stocks (Percent)	--	--	--	--	--	59.1	--
Percent of Total Petroleum Stocks (Percent)	--	--	--	--	--	33.2	--
Days of Total Petroleum Net Imports (Days)	--	--	--	--	--	--	--
SPR Receipts Detail							
Receipts	--	--	--	--	--	--	--
Domestic	--	--	--	--	--	--	--
Imports	--	--	--	--	--	--	--
Imported by SPR	--	--	--	--	--	--	--
Imported for SPR by Others	--	--	--	--	--	--	--
Imports							
PAD District of Entry	16,372	84,574	37,813	11,961	42,824	193,544	6,243
PAD District of Processing	17,733	75,736	47,002	9,284	43,789	193,544	6,243

-- = Not Applicable.

-- = No Data Reported.

¹ Crude oil adjustment was previously referred to as Unaccounted-for Crude Oil.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

Notes: Totals may not equal the sum of components due to independent rounding. Values of Domestic Crude Oil Field Production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," and EIA-817, "Monthly Tanker and Barge Movements Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 26. Production of Crude Oil by PAD District and State, October 2019
(Thousand Barrels)

PAD District and State	October 2019		January-October 2019	
	Total	Daily Average	Total	Daily Average
PAD District 1	2,390	77	20,357	67
Florida	144	5	1,492	5
New York	19	1	184	1
Pennsylvania	576	19	5,234	17
Virginia	0	0	3	0
West Virginia	1,650	53	13,445	44
PAD District 2	71,214	2,297	667,998	2,197
Illinois	704	23	6,821	22
Indiana	133	4	1,291	4
Kansas	2,741	88	27,666	91
Kentucky	192	6	1,930	6
Michigan	456	15	4,301	14
Missouri	7	0	69	0
Nebraska	159	5	1,649	5
North Dakota	45,709	1,474	423,242	1,392
Ohio	2,651	86	23,102	76
Oklahoma	18,351	592	176,792	582
South Dakota	92	3	967	3
Tennessee	19	1	167	1
PAD District 3	258,940	8,353	2,425,027	7,977
Alabama	384	12	4,011	13
Arkansas	391	13	3,898	13
Louisiana	3,751	121	36,570	120
Mississippi	1,499	48	14,282	47
New Mexico	30,435	982	273,406	899
Texas	163,465	5,273	1,525,051	5,017
Federal Offshore PAD District 3	59,015	1,904	567,809	1,868
PAD District 4	31,271	1,009	287,800	947
Colorado	17,161	554	153,853	506
Idaho	1	0	20	0
Montana	1,972	64	19,027	63
Utah	3,121	101	31,246	103
Wyoming	9,015	291	83,654	275
PAD District 5	28,491	919	280,010	921
Alaska	14,718	475	140,510	462
South Alaska	422	14	4,349	14
North Slope	14,296	461	136,161	448
Arizona	1	0	6	0
California	13,358	431	135,609	446
Nevada	23	1	218	1
Federal Offshore PAD District 5	391	13	3,668	12
U.S. Total	392,305	12,655	3,681,192	12,109

— = No Data Reported.

Note: Year-to-date totals include revised monthly production estimates by state published in Petroleum Navigator. Crude oil production quantities are estimated by state and summed to the PADD and the U.S. level. State production estimates reported by EIA are normally different from data reported by state agencies. For example, production estimates for Texas reported on table 26 are different from production reported by the Railroad Commission of Texas. See EIA "Today In Energy" article released on July 10, 2015 (<http://www.eia.gov/todayinenergy/detail.cfm?id=22012>) for an explanation of differences in production data for Texas. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," state government agencies, U.S. Department of the Interior, and the Bureau of Ocean Energy Management.

Table 27. Natural Gas Plant Net Production and Stocks of Petroleum Products by PAD and Refining Districts, October 2019
(Thousand Barrels)

Commodity	Production						
	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Hydrocarbon Gas Liquids	13	16,809	16,822	6,039	10,428	17,905	34,372
Natural Gas Liquids	13	16,809	16,822	6,039	10,428	17,905	34,372
Ethane	—	5,960	5,960	1,950	2,218	7,286	11,454
Propane	4	6,272	6,276	2,552	4,178	5,677	12,407
Normal Butane	9	1,983	1,992	542	1,826	1,973	4,341
Isobutane	—	837	837	566	535	959	2,060
Natural Gasoline	—	1,757	1,757	429	1,671	2,010	4,110

Commodity	Production								
	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Hydrocarbon Gas Liquids	70,121	5,257	5,868	570	7,222	89,038	13,886	1,558	155,676
Natural Gas Liquids	70,121	5,257	5,868	570	7,222	89,038	13,886	1,558	155,676
Ethane	30,114	2,114	2,186	123	2,756	37,293	3,385	1	58,093
Propane	21,375	1,626	1,963	160	2,376	27,500	5,180	285	51,648
Normal Butane	7,262	-3,212	681	81	725	5,537	2,059	235	14,164
Isobutane	4,031	4,175	394	58	548	9,206	1,029	332	13,464
Natural Gasoline	7,339	554	644	148	817	9,502	2,233	705	18,307

Commodity	Stocks						
	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Hydrocarbon Gas Liquids	4	249	253	1,090	163	1,053	2,306
Natural Gas Liquids	4	249	253	1,090	163	1,053	2,306
Ethane	—	—	—	32	3	206	241
Propane	2	104	106	752	71	385	1,208
Normal Butane	2	58	60	140	34	193	367
Isobutane	—	14	14	81	9	95	185
Natural Gasoline	—	73	73	85	46	174	305

Commodity	Stocks								
	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Hydrocarbon Gas Liquids	230	423	1,656	22	—	2,331	176	522	5,588
Natural Gas Liquids	230	423	1,656	22	—	2,331	176	522	5,588
Ethane	73	172	—	—	—	245	5	—	491
Propane	40	176	44	16	—	276	67	111	1,768
Normal Butane	32	58	1,310	5	—	1,405	47	344	2,223
Isobutane	55	15	170	—	—	240	16	27	482
Natural Gasoline	30	2	132	1	—	165	41	40	624

— = No Data Reported.

Note: Refer to Appendix A for Refining District descriptions.

Sources: Energy Information Administration (EIA) Form EIA-816, "Monthly Natural Gas Liquids Report."

Table 28. Refinery and Blender Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, October 2019
(Thousand Barrels)

Commodity	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Crude Oil	19,466	3,178	22,644	73,629	13,863	25,766	113,258
Hydrocarbon Gas Liquids	2,264	—	2,264	2,687	278	1,294	4,259
Natural Gas Liquids	2,264	—	2,264	2,687	278	1,294	4,259
Normal Butane	1,773	—	1,773	790	198	478	1,466
Isobutane	169	—	169	1,316	53	269	1,638
Natural Gasoline	322	—	322	581	27	547	1,155
Other Liquids	83,696	6,562	90,258	13,037	4,494	2,630	20,161
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	10,083	867	10,950	6,010	1,486	1,888	9,384
Hydrogen	92	14	106	638	190	165	993
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	9,991	853	10,844	5,354	1,296	1,723	8,373
Fuel Ethanol	9,813	783	10,596	5,083	1,199	1,647	7,929
Renewable Diesel Fuel ²	178	70	248	271	97	76	444
Other Renewable Fuels	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	18	—	—	18
Unfinished Oils (net)	2,495	-119	2,376	-122	-718	-724	-1,564
Naphthas and Lighter	725	-74	651	191	-166	55	80
Kerosene and Light Gas Oils	220	—	220	-168	-223	26	-365
Heavy Gas Oils	1,225	-38	1,187	372	-329	-824	-781
Residuum	325	-7	318	-517	—	19	-498
Motor Gasoline Blend.Comp. (MGBC)(net)	71,118	5,814	76,932	7,149	3,726	1,466	12,341
Reformulated - RBOB	19,434	—	19,434	-151	1,422	1,019	2,290
Conventional	51,684	5,814	57,498	7,300	2,304	447	10,051
CBOB	43,284	5,796	49,080	7,643	2,282	364	10,289
GTAB	2,002	—	2,002	—	—	—	—
Other	6,398	18	6,416	-343	22	83	-238
Aviation Gasoline Blend. Comp. (net)	—	—	—	—	—	—	—
Total Input	105,426	9,740	115,166	89,353	18,635	29,690	137,678

See footnotes at end of table.

Table 28. Refinery and Blender Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, October 2019
(Thousand Barrels) — Continued

Commodity	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Crude Oil	21,363	125,930	100,945	7,354	2,918	258,510	16,870	74,825	486,107
Hydrocarbon Gas Liquids	783	7,478	4,233	85	143	12,722	590	2,217	22,052
Natural Gas Liquids	783	7,478	4,233	85	143	12,722	590	2,217	22,052
Normal Butane	346	2,606	1,829	49	—	4,830	211	788	9,068
Isobutane	274	2,109	1,426	34	143	3,986	170	805	6,768
Natural Gasoline	163	2,763	978	2	—	3,906	209	624	6,216
Other Liquids	8,907	-40,005	-24,716	7,323	66	-48,425	-69	10,978	72,903
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	2,272	2,824	2,076	1,200	253	8,625	1,165	6,729	36,853
Hydrogen	6	1,848	1,499	68	59	3,480	201	1,293	6,073
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	2,266	976	577	1,132	194	5,145	964	5,436	30,762
Fuel Ethanol	2,162	914	543	1,048	170	4,837	924	4,923	29,209
Renewable Diesel Fuel ²	104	57	34	84	24	303	40	501	1,536
Other Renewable Fuels	—	5	—	—	—	5	—	12	17
Other Hydrocarbons	—	—	—	—	—	—	—	—	18
Unfinished Oils (net)	-725	-3,608	10,069	-248	-133	5,355	-670	613	6,110
Naphthas and Lighter	-331	-7,377	829	-73	-197	-7,149	-81	-3	-6,502
Kerosene and Light Gas Oils	-74	-1,831	651	35	-68	-1,287	-410	-1,787	-3,629
Heavy Gas Oils	-96	4,089	5,026	-111	132	9,040	176	1,940	11,562
Residuum	-224	1,511	3,563	-99	—	4,751	-355	463	4,679
Motor Gasoline Blend.Comp. (MGBC)(net)	7,309	-39,221	-36,859	6,371	-54	-62,454	-564	3,636	29,891
Reformulated - RBOB	6,109	-9,975	-3,086	—	-500	-7,452	—	2,091	16,363
Conventional	1,200	-29,246	-33,773	6,371	446	-55,002	-564	1,545	13,528
CBOB	1,146	-31,383	-33,254	6,384	522	-56,585	-988	1,580	3,376
GTAB	—	—	—	—	—	—	—	—	2,002
Other	54	2,137	-519	-13	-76	1,583	424	-35	8,150
Aviation Gasoline Blend. Comp. (net)	51	—	-2	—	—	49	—	—	49
Total Input	31,053	93,403	80,462	14,762	3,127	222,807	17,391	88,020	581,062

— = No Data Reported.

¹ Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

² Renewable diesel fuel includes biodiesel and other renewable diesel.

Note: Totals may not equal sum of components due to independent rounding.

Note: Refer to Appendix A for Refining District descriptions.

Source: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," and EIA-815, "Monthly Bulk Terminal and Blender Report."

Table 29. Refinery and Blender Net Production of Finished Petroleum Products by PAD and Refining Districts, October 2019
(Thousand Barrels)

Commodity	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Hydrocarbon Gas Liquids	703	-27	676	830	29	139	998
Natural Gas Liquids	222	-27	195	176	-67	-83	26
Ethane	-	-	-	-	-	-	-
Propane	434	25	459	1,309	225	346	1,880
Normal Butane	-171	-34	-205	-1,055	-272	-376	-1,703
Isobutane	-41	-18	-59	-78	-20	-53	-151
Natural Gasoline	-	-	-	-	-	-	-
Refinery Olefins	481	-	481	654	96	222	972
Ethylene	16	-	16	-	-	-	-
Propylene	523	-	523	730	96	228	1,054
Normal Butylene	-58	-	-58	-76	-	-6	-82
Isobutylene	-	-	-	-	-	-	-
Finished Motor Gasoline	94,073	7,804	101,877	54,496	11,569	17,135	83,200
Reformulated	40,310	79	40,389	8,650	1,664	1,132	11,446
Reformulated Blended with Fuel Ethanol	40,310	79	40,389	8,650	1,664	1,132	11,446
Reformulated Other	-	-	-	-	-	-	-
Conventional	53,763	7,725	61,488	45,846	9,905	16,003	71,754
Conventional Blended with Fuel Ethanol	56,750	7,681	64,431	41,756	10,132	14,797	66,685
Ed55 and Lower	56,711	7,681	64,392	41,745	10,099	14,723	66,567
Greater than Ed55	39	-	39	11	33	74	118
Conventional Other	-2,987	44	-2,943	4,090	-227	1,206	5,069
Finished Aviation Gasoline	-	-	-	-	44	-	44
Kerosene-Type Jet Fuel	2,067	-1	2,066	6,302	862	941	8,105
Kerosene	137	-	137	204	-	35	239
Distillate Fuel Oil	6,793	921	7,714	19,530	4,562	9,873	33,965
15 ppm sulfur and under	6,807	808	7,615	19,647	4,568	10,016	34,231
Greater than 15 ppm to 500 ppm sulfur	-102	95	-7	-	-	-41	-41
Greater than 500 ppm sulfur	88	18	106	-117	-6	-102	-225
Residual Fuel Oil	660	4	664	1,083	223	63	1,369
Less than 0.31 percent sulfur	23	3	26	56	-	-	56
0.31 to 1.00 percent sulfur	338	1	339	105	75	-	180
Greater than 1.00 percent sulfur	299	-	299	922	148	63	1,133
Petrochemical Feedstocks	5	-	5	903	-	31	934
Naphtha for Petro. Feed. Use	5	-	5	572	-	-	572
Other Oils for Petro. Feed. Use	-	-	-	331	-	31	362
Special Naphthas	-	21	21	-44	-	74	30
Lubricants	236	184	420	-	-	167	167
Waxes	-	9	9	-	-	27	27
Petroleum Coke	810	20	830	3,827	620	806	5,253
Marketable	366	-	366	2,802	502	644	3,948
Catalyst	444	20	464	1,025	118	162	1,305
Asphalt and Road Oil	431	723	1,154	3,778	1,092	457	5,327
Still Gas	936	42	978	2,568	532	989	4,089
Miscellaneous Products	62	30	92	294	71	39	404
Total	106,913	9,730	116,643	93,771	19,604	30,776	144,151
Processing Gain(-) or Loss(+) ¹	-1,487	10	-1,477	-4,418	-969	-1,086	-6,473

See footnotes at end of table.

Table 29. Refinery and Blender Net Production of Finished Petroleum Products by PAD and Refining Districts, October 2019
(Thousand Barrels) — Continued

Commodity	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Hydrocarbon Gas Liquids	313	4,684	4,635	13	1	9,646	102	1,269	12,691
Natural Gas Liquids	3	1,263	1,604	-25	-12	2,833	61	1,187	4,302
Ethane	1	90	22	—	—	113	—	—	113
Propane	171	2,035	1,904	5	26	4,141	240	1,085	7,805
Normal Butane	-195	-311	-411	-30	-39	-986	-131	-52	-3,077
Isobutane	26	-551	89	—	1	-435	-48	154	-539
Natural Gasoline	—	—	—	—	—	—	—	—	—
Refinery Olefins	310	3,421	3,031	38	13	6,813	41	82	8,389
Ethylene	—	—	—	—	—	—	—	—	16
Propylene	308	3,652	2,986	38	—	6,984	8	139	8,708
Normal Butylene	2	-204	45	—	13	-144	33	-57	-308
Isobutylene	—	-27	—	—	—	-27	—	—	-27
Finished Motor Gasoline	21,250	25,496	16,573	9,586	1,662	74,567	9,248	48,977	317,869
Reformulated	7,648	6,945	—	—	—	14,593	—	34,415	100,843
Reformulated Blended with Fuel Ethanol	7,648	6,945	—	—	—	14,593	—	34,415	100,843
Reformulated Other	—	—	—	—	—	—	—	—	—
Conventional	13,602	18,551	16,573	9,586	1,662	59,974	9,248	14,562	217,026
Conventional Blended with Fuel Ethanol	13,620	1,629	5,152	10,365	1,707	32,473	9,253	14,401	187,243
Ed55 and Lower	13,595	1,629	5,152	10,351	1,707	32,434	9,239	14,375	187,007
Greater than Ed55	25	—	—	14	—	39	14	26	236
Conventional Other	-18	16,922	11,421	-779	-45	27,501	-5	161	29,783
Finished Aviation Gasoline	86	125	152	—	—	363	3	—	410
Kerosene-Type Jet Fuel	1,401	12,739	12,483	211	0	26,834	1,005	13,245	51,255
Kerosene	9	66	18	28	—	121	—	6	503
Distillate Fuel Oil	6,917	39,069	35,676	2,560	992	85,214	5,195	16,487	148,575
15 ppm sulfur and under	7,019	35,789	29,780	2,451	992	76,031	4,993	15,496	138,366
Greater than 15 ppm to 500 ppm sulfur	-102	368	3,126	116	—	3,508	139	369	3,968
Greater than 500 ppm sulfur	—	2,912	2,770	-7	—	5,675	63	622	6,241
Residual Fuel Oil	379	947	2,669	-3	67	4,059	360	4,086	10,538
Less than 0.31 percent sulfur	282	—	1,014	—	—	1,296	207	9	1,594
0.31 to 1.00 percent sulfur	—	61	337	-3	—	395	36	305	1,255
Greater than 1.00 percent sulfur	97	886	1,318	—	67	2,368	117	3,772	7,689
Petrochemical Feedstocks	131	4,058	2,573	—	—	6,762	—	2	7,703
Naphtha for Petro. Feed. Use	118	2,273	1,114	—	—	3,505	—	2	4,084
Other Oils for Petro. Feed. Use	13	1,785	1,459	—	—	3,257	—	—	3,619
Special Naphthas	47	648	—	229	—	924	—	22	997
Lubricants	10	1,626	1,690	929	—	4,255	—	455	5,297
Waxes	—	46	42	17	—	105	—	—	141
Petroleum Coke	358	7,441	5,817	212	30	13,858	619	4,396	24,956
Marketable	140	5,394	4,390	196	—	10,120	421	3,313	18,168
Catalyst	218	2,047	1,427	16	30	3,738	198	1,083	6,788
Asphalt and Road Oil	217	194	643	800	19	1,873	900	828	10,082
Still Gas	685	5,214	4,128	238	77	10,342	577	3,332	19,318
Miscellaneous Products	113	771	507	22	40	1,453	109	441	2,499
Total	31,916	103,124	87,606	14,842	2,888	240,376	18,118	93,546	612,834
Processing Gain(-) or Loss(+) ¹	-863	-9,721	-7,144	-80	239	-17,569	-727	-5,526	-31,772

— = No Data Reported.

¹ Represents the arithmetic difference between input and production.

Note: Refer to Appendix A for Refining District descriptions.

Source: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," and EIA-815, "Monthly Bulk Terminal and Blender Report."

Table 30. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, October 2019
(Thousand Barrels, Except Where Noted)

Commodity	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Crude Oil	19,466	3,178	22,644	73,629	13,863	25,766	113,258
Hydrocarbon Gas Liquids	441	-	441	2,473	53	735	3,261
Natural Gas Liquids	441	-	441	2,473	53	735	3,261
Normal Butane	272	-	272	579	-	42	621
Isobutane	169	-	169	1,316	53	269	1,638
Natural Gasoline	-	-	-	578	-	424	1,002
Other Liquids	-8,022	114	-7,908	-33,832	-4,775	-11,303	-49,910
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	164	172	336	912	369	304	1,585
Hydrogen	92	14	106	638	190	165	993
Oxygenates (excluding Fuel Ethanol)	-	-	-	-	-	-	-
Methyl Tertiary Butyl Ether (MTBE)	-	-	-	-	-	-	-
All Other Oxygenates ¹	-	-	-	-	-	-	-
Renewable Fuels (including Fuel Ethanol)	72	158	230	256	179	139	574
Fuel Ethanol	72	134	206	165	153	119	437
Renewable Diesel Fuel ²	-	24	24	91	26	20	137
Other Renewable Fuels	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	18	-	-	18
Unfinished Oils (net)	2,495	-119	2,376	-161	-718	-724	-1,603
Naphthas and Lighter	725	-74	651	191	-166	55	80
Kerosene and Light Gas Oils	220	-	220	-168	-223	26	-365
Heavy Gas Oils	1,225	-38	1,187	372	-329	-824	-781
Residuum	325	-7	318	-556	-	19	-537
Motor Gasoline Blend.Comp. (MGBC)(net)	-10,681	61	-10,620	-34,583	-4,426	-10,883	-49,892
Reformulated - RBOB	-7,366	-	-7,366	-7,465	-45	-	-7,510
Conventional	-3,315	61	-3,254	-27,118	-4,381	-10,883	-42,382
CBOB	-2,654	43	-2,611	-26,760	-4,364	-10,966	-42,090
GTAB	-	-	-	-	-	-	-
Other	-661	18	-643	-358	-17	83	-292
Aviation Gasoline Blend. Comp. (net)	-	-	-	-	-	-	-
Total Input to Refineries	11,885	3,292	15,177	42,270	9,141	15,198	66,609
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	628	103	731	2,365	459	832	3,656
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operable Utilization Rate (percent) ³	55.8	105.0	59.7	88.3	84.0	90.2	88.2
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Reforming	117	15	132	408	68	162	638
Catalytic Cracking	240	16	256	697	75	177	949
Catalytic Hydrocracking	34	-	34	166	49	59	274
Delayed and Fluid Coking	46	-	46	330	43	81	455
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	0.98	1.68	1.07	1.57	1.15	0.59	1.30
API Gravity, Weighted Average (degrees)	35.50	31.36	34.94	32.95	31.21	38.93	34.06
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operating	791	98	889	2,473	509	923	3,905
Idle	335	-	335	205	38	-	243
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-

See footnotes at end of table.

Table 30. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, October 2019
(Thousand Barrels, Except Where Noted) — Continued

Commodity	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Crude Oil	21,363	125,930	100,945	7,354	2,918	258,510	16,870	74,825	486,107
Hydrocarbon Gas Liquids	673	5,064	4,130	36	143	10,046	487	2,159	16,394
Natural Gas Liquids	673	5,064	4,130	36	143	10,046	487	2,159	16,394
Normal Butane	247	1,838	1,726	—	—	3,811	163	730	5,597
Isobutane	274	2,109	1,426	34	143	3,986	167	805	6,765
Natural Gasoline	152	1,117	978	2	—	2,249	157	624	4,032
Other Liquids	-9,757	-50,861	-27,965	-1,734	-1,317	-91,634	-4,927	-35,324	-189,703
Hydrogen/Oxygenates/Renewables/									
Other Hydrocarbons	304	1,904	1,753	141	98	4,200	504	1,575	8,200
Hydrogen	6	1,848	1,499	68	59	3,480	201	1,293	6,073
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	298	56	254	73	39	720	303	282	2,109
Fuel Ethanol	233	49	220	47	29	578	279	103	1,603
Renewable Diesel Fuel ²	65	7	34	26	10	142	24	179	506
Other Renewable Fuels	—	—	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	—	—	—	—	—	18
Unfinished Oils (net)	-725	-3,611	9,950	-248	-133	5,233	-670	613	5,949
Naphthas and Lighter	-331	-7,377	829	-73	-197	-7,149	-81	-3	-6,502
Kerosene and Light Gas Oils	-74	-1,834	669	35	-68	-1,272	-410	-1,787	-3,614
Heavy Gas Oils	-96	4,089	4,889	-111	132	8,903	176	1,940	11,425
Residuum	-224	1,511	3,563	-99	—	4,751	-355	463	4,640
Motor Gasoline Blend.Comp. (MGBBC)(net)	-9,387	-49,154	-39,666	-1,627	-1,282	-101,116	-4,761	-37,512	-203,901
Reformulated - RBOB	-746	-15,202	-3,086	—	-500	-19,534	—	-28,299	-62,709
Conventional	-8,641	-33,952	-36,580	-1,627	-782	-81,582	-4,761	-9,213	-141,192
CBOB	-8,695	-29,513	-34,610	-1,614	-702	-75,134	-5,184	-9,178	-134,197
GTAB	—	—	—	—	—	—	—	—	—
Other	54	-4,439	-1,970	-13	-80	-6,448	423	-35	-6,995
Aviation Gasoline Blend. Comp. (net)	51	—	-2	—	—	49	—	—	49
Total Input to Refineries	12,279	80,133	77,110	5,656	1,744	176,922	12,430	41,660	312,798
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	698	4,218	3,432	208	85	8,641	545	2,563	16,136
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operable Utilization Rate (percent) ³	93.7	83.7	92.9	81.3	62.3	87.5	79.4	89.1	85.8
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Reforming	146	513	567	34	10	1,270	82	394	2,517
Catalytic Cracking	164	1,317	995	18	26	2,520	143	693	4,562
Catalytic Hydrocracking	47	319	421	16	12	816	26	449	1,599
Delayed and Fluid Coking	21	627	510	30	—	1,188	45	415	2,149
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.55	1.37	1.24	1.55	0.92	1.25	1.41	1.25	1.26
API Gravity, Weighted Average (degrees)	40.07	33.88	33.30	29.98	35.49	34.11	32.67	28.62	33.20
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operating	745	5,007	3,696	256	136	9,841	629	2,875	18,138
Idle	—	35	—	—	—	35	58	—	670
Alaskan Crude Oil Receipts	—	—	—	—	—	—	—	10,830	10,830

— = No Data Reported.

NA = Not Available.

¹ Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

² Renewable diesel fuel includes biodiesel and other renewable diesel.

³ Represents gross input divided by operable calendar day capacity.

Note: Totals may not equal sum of components due to independent rounding.

Note: Refer to Appendix A for Refining District descriptions.

Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report."

Table 31. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts, October 2019
(Thousand Barrels)

Commodity	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Hydrocarbon Gas Liquids	703	-27	676	830	29	139	998
Natural Gas Liquids	222	-27	195	176	-67	-83	26
Ethane	-	-	-	-	-	-	-
Propane	434	25	459	1,309	225	346	1,880
Normal Butane	-171	-34	-205	-1,055	-272	-376	-1,703
Isobutane	-41	-18	-59	-78	-20	-53	-151
Natural Gasoline	-	-	-	-	-	-	-
Refinery Olefins	481	-	481	654	96	222	972
Ethylene	16	-	16	-	-	-	-
Propylene	523	-	523	730	96	228	1,054
Normal Butylene	-58	-	-58	-76	-	-6	-82
Isobutylene	-	-	-	-	-	-	-
Finished Motor Gasoline	709	1,400	2,109	7,586	2,146	2,699	12,431
Reformulated	709	-	709	-	-	-	-
Reformulated Blended with Fuel Ethanol	709	-	709	-	-	-	-
Reformulated Other	-	-	-	-	-	-	-
Conventional	-	1,400	1,400	7,586	2,146	2,699	12,431
Conventional Blended with Fuel Ethanol	-	1,322	1,322	1,673	1,660	1,214	4,547
Ed55 and Lower	-	1,322	1,322	1,673	1,660	1,214	4,547
Greater than Ed55	-	-	-	-	-	-	-
Conventional Other	-	78	78	5,913	486	1,485	7,884
Finished Aviation Gasoline	-	-	-	-	44	-	44
Kerosene-Type Jet Fuel	2,367	-	2,367	6,337	862	941	8,140
Kerosene	137	-	137	204	-	35	239
Distillate Fuel Oil	6,289	874	7,163	19,363	4,493	9,819	33,675
15 ppm sulfur and under	6,414	761	7,175	19,480	4,499	9,962	33,941
Greater than 15 ppm to 500 ppm sulfur	1	95	96	-	-	-148	-148
Greater than 500 ppm sulfur	-126	18	-108	-117	-6	5	-118
Residual Fuel Oil	685	4	689	1,083	223	63	1,369
Less than 0.31 percent sulfur	48	3	51	56	-	-	56
0.31 to 1.00 percent sulfur	338	1	339	105	75	-	180
Greater than 1.00 percent sulfur	299	-	299	922	148	63	1,133
Petrochemical Feedstocks	5	-	5	903	-	31	934
Naphtha for Petro. Feed. Use	5	-	5	572	-	-	572
Other Oils for Petro. Feed. Use	-	-	-	331	-	31	362
Special Naphthas	-	21	21	-44	-	74	30
Lubricants	236	184	420	-	-	167	167
Waxes	-	9	9	-	-	27	27
Petroleum Coke	810	20	830	3,827	620	806	5,253
Marketable	366	-	366	2,802	502	644	3,948
Catalyst	444	20	464	1,025	118	162	1,305
Asphalt and Road Oil	431	723	1,154	3,739	1,092	455	5,286
Still Gas	936	42	978	2,568	532	989	4,089
Miscellaneous Products	62	30	92	294	71	39	404
Total	13,370	3,280	16,650	46,690	10,112	16,284	73,086
Processing Gain(-) or Loss(+) ¹	-1,485	12	-1,473	-4,420	-971	-1,086	-6,477

See footnotes at end of table.

Table 31. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts, October 2019
(Thousand Barrels) — Continued

Commodity	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Hydrocarbon Gas Liquids	313	4,684	4,635	13	1	9,646	102	1,269	12,691
Natural Gas Liquids	3	1,263	1,604	-25	-12	2,833	61	1,187	4,302
Ethane	1	90	22	—	—	113	—	—	113
Propane	171	2,035	1,904	5	26	4,141	240	1,085	7,805
Normal Butane	-195	-311	-411	-30	-39	-986	-131	-52	-3,077
Isobutane	26	-551	89	—	1	-435	-48	154	-539
Natural Gasoline	—	—	—	—	—	—	—	—	—
Refinery Olefins	310	3,421	3,031	38	13	6,813	41	82	8,389
Ethylene	—	—	—	—	—	—	—	—	16
Propylene	308	3,652	2,986	38	—	6,984	8	139	8,708
Normal Butylene	2	-204	45	—	13	-144	33	-57	-308
Isobutylene	—	-27	—	—	—	-27	—	—	-27
Finished Motor Gasoline	2,505	12,316	13,342	536	293	28,992	4,304	2,951	50,787
Reformulated	—	—	—	—	—	—	—	635	1,344
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—	—	635	1,344
Reformulated Other	—	—	—	—	—	—	—	—	—
Conventional	2,505	12,316	13,342	536	293	28,992	4,304	2,316	49,443
Conventional Blended with Fuel Ethanol	2,316	489	1,928	496	293	5,522	2,848	380	14,619
Ed55 and Lower	2,313	489	1,928	496	293	5,519	2,848	380	14,616
Greater than Ed55	3	—	—	—	—	3	—	—	3
Conventional Other	189	11,827	11,414	40	—	23,470	1,456	1,936	34,824
Finished Aviation Gasoline	86	125	152	—	—	363	3	—	410
Kerosene-Type Jet Fuel	1,401	12,739	12,473	211	—	26,824	946	13,244	51,521
Kerosene	9	66	15	28	—	118	—	0	494
Distillate Fuel Oil	6,887	38,888	35,686	2,502	978	84,941	5,238	16,171	147,188
15 ppm sulfur and under	6,989	35,751	29,792	2,393	978	75,903	5,036	15,194	137,249
Greater than 15 ppm to 500 ppm sulfur	-102	368	3,126	116	—	3,508	139	369	3,964
Greater than 500 ppm sulfur	—	2,769	2,768	-7	—	5,530	63	608	5,975
Residual Fuel Oil	379	1,039	2,506	-3	67	3,988	360	4,077	10,483
Less than 0.31 percent sulfur	282	—	956	—	—	1,238	207	—	1,552
0.31 to 1.00 percent sulfur	—	61	337	-3	—	395	36	305	1,255
Greater than 1.00 percent sulfur	97	978	1,213	—	67	2,355	117	3,772	7,676
Petrochemical Feedstocks	131	4,058	2,573	—	—	6,762	—	2	7,703
Naphtha for Petro. Feed. Use	118	2,273	1,114	—	—	3,505	—	2	4,084
Other Oils for Petro. Feed. Use	13	1,785	1,459	—	—	3,257	—	—	3,619
Special Naphthas	47	648	—	229	—	924	—	22	997
Lubricants	10	1,626	1,690	929	—	4,255	—	455	5,297
Waxes	—	46	42	17	—	105	—	—	141
Petroleum Coke	358	7,441	5,817	212	30	13,858	619	4,396	24,956
Marketable	140	5,394	4,390	196	—	10,120	421	3,313	18,168
Catalyst	218	2,047	1,427	16	30	3,738	198	1,083	6,788
Asphalt and Road Oil	217	194	689	800	19	1,919	900	828	10,087
Still Gas	685	5,214	4,128	238	77	10,342	577	3,332	19,318
Miscellaneous Products	113	771	507	22	40	1,453	109	441	2,499
Total	13,141	89,855	84,255	5,734	1,505	194,490	13,158	47,188	344,572
Processing Gain(-) or Loss(+) ¹	-862	-9,722	-7,145	-78	239	-17,568	-728	-5,528	-31,774

— = No Data Reported.

¹ Represents the arithmetic difference between input and production.

Note: Refer to Appendix A for Refining District descriptions.

Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report."

Table 32. Blender Net Inputs of Petroleum Products by PAD District, October 2019
(Thousand Barrels)

Commodity	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Hydrocarbon Gas Liquids	1,823	—	1,823	214	225	559	998
Natural Gas Liquids	1,823	—	1,823	214	225	559	998
Normal Butane	1,501	—	1,501	211	198	436	845
Isobutane	—	—	—	—	—	—	—
Natural Gasoline	322	—	322	3	27	123	153
Other Liquids	91,718	6,448	98,166	46,869	9,269	13,933	70,071
Oxygenates/Renewables	9,919	695	10,614	5,098	1,117	1,584	7,799
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	9,919	695	10,614	5,098	1,117	1,584	7,799
Fuel Ethanol	9,741	649	10,390	4,918	1,046	1,528	7,492
Renewable Diesel Fuel ²	178	46	224	180	71	56	307
Other Renewable Fuels	—	—	—	—	—	—	—
Unfinished Oils (net)	—	—	—	39	—	—	39
Naphthas and Lighter	—	—	—	—	—	—	—
Kerosene and Light Gas Oils	—	—	—	—	—	—	—
Heavy Gas Oils	—	—	—	—	—	—	—
Residuum	—	—	—	39	—	—	39
Motor Gasoline Blend.Comp. (MGBC)(net)	81,799	5,753	87,552	41,732	8,152	12,349	62,233
Reformulated - RBOB	26,800	—	26,800	7,314	1,467	1,019	9,800
Conventional	54,999	5,753	60,752	34,418	6,685	11,330	52,433
CBOB	45,938	5,753	51,691	34,403	6,646	11,330	52,379
GTAB	2,002	—	2,002	—	—	—	—
Other	7,059	—	7,059	15	39	—	54
Aviation Gasoline Blend. Comp. (net)	—	—	—	—	—	—	—
Total Input	93,541	6,448	99,989	47,083	9,494	14,492	71,069

Commodity	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Hydrocarbon Gas Liquids	110	2,414	103	49	—	2,676	103	58	5,658
Natural Gas Liquids	110	2,414	103	49	—	2,676	103	58	5,658
Normal Butane	99	768	103	49	—	1,019	48	58	3,471
Isobutane	—	—	—	—	—	—	3	—	3
Natural Gasoline	11	1,646	—	—	—	1,657	52	—	2,184
Other Liquids	18,664	10,856	3,249	9,057	1,383	43,209	4,858	46,302	262,606
Oxygenates/Renewables	1,968	920	323	1,059	155	4,425	661	5,154	28,653
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	1,968	920	323	1,059	155	4,425	661	5,154	28,653
Fuel Ethanol	1,929	865	323	1,001	141	4,259	645	4,820	27,606
Renewable Diesel Fuel ²	39	50	—	58	14	161	16	322	1,030
Other Renewable Fuels	—	5	—	—	—	5	—	12	17
Unfinished Oils (net)	—	3	119	—	—	122	—	—	161
Naphthas and Lighter	—	—	—	—	—	—	—	—	—
Kerosene and Light Gas Oils	—	3	-18	—	—	-15	—	—	-15
Heavy Gas Oils	—	—	137	—	—	137	—	—	137
Residuum	—	—	—	—	—	—	—	—	39
Motor Gasoline Blend.Comp. (MGBC)(net)	16,696	9,933	2,807	7,998	1,228	38,662	4,197	41,148	233,792
Reformulated - RBOB	6,855	5,227	—	—	—	12,082	—	30,390	79,072
Conventional	9,841	4,706	2,807	7,998	1,228	26,580	4,197	10,758	154,720
CBOB	9,841	-1,870	1,356	7,998	1,224	18,549	4,196	10,758	137,573
GTAB	—	—	—	—	—	—	—	—	2,002
Other	—	6,576	1,451	—	4	8,031	1	—	15,145
Aviation Gasoline Blend. Comp. (net)	—	—	—	—	—	—	—	—	—
Total Input	18,774	13,270	3,352	9,106	1,383	45,885	4,961	46,360	268,264

— = No Data Reported.

¹ Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

² Renewable diesel fuel includes biodiesel and other renewable diesel.

Note: Refer to Appendix A for Refining District descriptions.

Sources: Energy Information Administration (EIA) Form EIA-815, "Monthly Bulk Terminal and Blender Report."

Table 33. Blender Net Production of Petroleum Products by PAD District, October 2019
(Thousand Barrels)

Commodity	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Finished Motor Gasoline	93,364	6,404	99,768	46,910	9,423	14,436	70,769
Reformulated	39,601	79	39,680	8,650	1,664	1,132	11,446
Reformulated Blended with Fuel Ethanol	39,601	79	39,680	8,650	1,664	1,132	11,446
Reformulated Other	-	-	-	-	-	-	-
Conventional	53,763	6,325	60,088	38,260	7,759	13,304	59,323
Conventional Blended with Fuel Ethanol	56,750	6,359	63,109	40,083	8,472	13,583	62,138
Ed55 and Lower	56,711	6,359	63,070	40,072	8,439	13,509	62,020
Greater than Ed55	39	-	39	11	33	74	118
Conventional Other	-2,987	-34	-3,021	-1,823	-713	-279	-2,815
Finished Aviation Gasoline	-	-	-	-	-	-	-
Kerosene-Type Jet Fuel	-300	-1	-301	-35	-	0	-35
Kerosene	-	-	-	-	-	-	-
Distillate Fuel Oil	504	47	551	167	69	54	290
15 ppm sulfur and under	393	47	440	167	69	54	290
Greater than 15 ppm to 500 ppm sulfur	-103	-	-103	-	-	107	107
Greater than 500 ppm sulfur	214	-	214	-	-	-107	-107
Residual Fuel Oil	-25	-	-25	-	-	-	-
Less than 0.31 percent sulfur	-25	-	-25	-	-	-	-
0.31 to 1.00 percent sulfur	-	-	-	-	-	-	-
Greater than 1.00 percent sulfur	-	-	-	-	-	-	-
Special Naphthas	-	-	-	-	-	-	-
Lubricants	-	-	-	-	-	-	-
Asphalt and Road Oil	-	-	-	39	-	2	41
Miscellaneous Products	-	-	-	-	-	-	-
Total Production	93,543	6,450	99,993	47,081	9,492	14,492	71,065
Processing Gain(-) or Loss(+) ¹	-2	-2	-4	2	2	0	4

Commodity	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Finished Motor Gasoline	18,745	13,180	3,231	9,050	1,369	45,575	4,944	46,026	267,082
Reformulated	7,648	6,945	-	-	-	14,593	-	33,780	99,499
Reformulated Blended with Fuel Ethanol	7,648	6,945	-	-	-	14,593	-	33,780	99,499
Reformulated Other	-	-	-	-	-	-	-	-	-
Conventional	11,097	6,235	3,231	9,050	1,369	30,982	4,944	12,246	167,583
Conventional Blended with Fuel Ethanol	11,304	1,140	3,224	9,869	1,414	26,951	6,405	14,021	172,624
Ed55 and Lower	11,282	1,140	3,224	9,855	1,414	26,915	6,391	13,995	172,391
Greater than Ed55	22	-	-	14	-	36	14	26	233
Conventional Other	-207	5,095	7	-819	-45	4,031	-1,461	-1,775	-5,041
Finished Aviation Gasoline	-	-	-	-	-	-	-	-	-
Kerosene-Type Jet Fuel	0	-	10	-	0	10	59	1	-266
Kerosene	-	-	3	-	-	3	-	6	9
Distillate Fuel Oil	30	181	-10	58	14	273	-43	316	1,387
15 ppm sulfur and under	30	38	-12	58	14	128	-43	302	1,117
Greater than 15 ppm to 500 ppm sulfur	-	-	-	-	-	-	-	-	4
Greater than 500 ppm sulfur	-	143	2	-	-	145	-	14	266
Residual Fuel Oil	-	-92	163	-	-	71	-	9	55
Less than 0.31 percent sulfur	-	-	58	-	-	58	-	9	42
0.31 to 1.00 percent sulfur	-	-	-	-	-	-	-	-	-
Greater than 1.00 percent sulfur	-	-92	105	-	-	13	-	-	13
Special Naphthas	-	-	-	-	-	-	-	-	-
Lubricants	-	-	-	-	-	-	-	-	-
Asphalt and Road Oil	-	-	-46	-	-	-46	-	-	-5
Miscellaneous Products	-	-	-	-	-	-	-	-	-
Total Production	18,775	13,269	3,351	9,108	1,383	45,886	4,960	46,358	268,262
Processing Gain(-) or Loss(+) ¹	-1	1	1	-2	0	-1	1	2	2

- = No Data Reported.

¹ Represents the arithmetic difference between input and production.

Note: Refer to Appendix A for Refining District descriptions.

Sources: Energy Information Administration (EIA) Form EIA-815, "Monthly Bulk Terminal and Blender Report."

Table 34. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts, October 2019
(Thousand Barrels)

Commodity	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Crude Oil	7,117	582	7,699	8,854	2,183	2,381	13,418
Petroleum Products	13,192	2,109	15,301	29,877	7,726	11,781	49,384
Hydrocarbon Gas Liquids	701	47	748	2,756	595	1,949	5,300
Natural Gas Liquids	435	47	482	2,220	580	1,921	4,721
Ethane	—	—	—	—	—	—	—
Propane	91	1	92	246	36	1,182	1,464
Normal Butane	232	35	267	1,556	495	234	2,285
Isobutane	112	11	123	238	49	301	588
Natural Gasoline	—	—	—	180	—	204	384
Refinery Olefins	266	0	266	536	15	28	579
Ethylene	—	—	—	—	—	—	—
Propylene	145	0	145	462	15	7	484
Normal Butylene	121	0	121	74	0	21	95
Isobutylene	0	0	0	0	0	0	0
Oxygenates/Renewable Fuels/Other Hydrocarbons ...	86	89	175	80	53	30	163
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	86	89	175	58	53	30	141
Fuel Ethanol	86	81	167	38	43	26	107
Renewable Diesel Fuel ²	—	8	8	20	10	4	34
Other Renewable Fuels	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	22	—	—	22
Unfinished Oils	4,256	440	4,696	8,629	1,615	3,968	14,212
Naphthas and Lighter	995	277	1,272	2,478	191	1,071	3,740
Kerosene and Light Gas Oils	698	—	698	1,633	296	355	2,284
Heavy Gas Oils	1,873	156	2,029	3,013	1,124	1,682	5,819
Residuum	690	7	697	1,505	4	860	2,369
Motor Gasoline Blending Components (MGBC)	4,201	187	4,388	7,791	1,977	2,759	12,527
Reformulated - RBOB	995	—	995	942	—	—	942
Conventional	3,206	187	3,393	6,849	1,977	2,759	11,585
CBOB	397	168	565	2,337	996	1,693	5,026
GTAB	—	—	—	—	—	—	—
Other	2,809	19	2,828	4,512	981	1,066	6,559
Aviation Gasoline Blending Components	—	—	—	—	—	—	—
Finished Motor Gasoline	—	57	57	988	160	265	1,413
Reformulated	—	—	—	—	—	—	—
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—	—
Reformulated Other	—	—	—	—	—	—	—
Conventional	—	57	57	988	160	265	1,413
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—	—
Ed55 and Lower	—	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—	—
Conventional Other	—	57	57	988	160	265	1,413
Finished Aviation Gasoline	—	—	—	—	59	—	59
Kerosene-Type Jet Fuel	656	—	656	1,257	290	315	1,862
Kerosene	106	3	109	128	—	16	144
Distillate Fuel Oil	1,619	307	1,926	3,266	931	1,568	5,765
15 ppm sulfur and under	1,290	102	1,392	3,088	793	1,412	5,293
Greater than 15 ppm to 500 ppm sulfur	104	189	293	—	9	82	91
Greater than 500 ppm sulfur	225	16	241	178	129	74	381
Residual Fuel Oil	824	17	841	716	194	42	952
Less than 0.31 percent sulfur	303	15	318	64	—	—	64
0.31 to 1.00 percent sulfur	80	2	82	71	33	—	104
Greater than 1.00 percent sulfur	441	—	441	581	161	42	784
Petrochemical Feedstocks	48	—	48	539	—	—	539
Naphtha for Petro. Feed. Use	48	—	48	438	—	—	438
Other Oils for Petro. Feed. Use	—	—	—	101	—	—	101
Special Naphthas	—	22	22	77	—	18	95
Lubricants	538	192	730	—	—	291	291
Waxes	—	352	352	—	—	68	68
Petroleum Coke	—	—	—	950	735	153	1,838
Marketable	—	—	—	950	735	153	1,838
Catalyst	—	—	—	—	—	—	—
Asphalt and Road Oil	145	374	519	2,616	1,107	334	4,057
Miscellaneous Products	12	22	34	84	10	5	99
Total Stocks, All Oils	20,309	2,691	23,000	38,731	9,909	14,162	62,802

See footnotes at end of table.

Table 34. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts, October 2019
(Thousand Barrels) — Continued

Commodity	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Crude Oil	1,702	25,138	17,504	1,236	434	46,014	2,925	22,036	92,092
Petroleum Products	11,111	61,757	53,609	4,125	1,522	132,124	10,650	50,066	257,525
Hydrocarbon Gas Liquids	3,326	2,236	5,695	15	120	11,392	484	1,989	19,913
Natural Gas Liquids	2,685	1,845	3,018	13	113	7,674	349	1,872	15,098
Ethane	186	—	—	—	—	186	—	—	186
Propane	666	353	312	3	4	1,338	29	84	3,007
Normal Butane	1,505	1,250	1,314	7	75	4,151	206	1,396	8,305
Isobutane	211	201	958	3	16	1,389	104	389	2,593
Natural Gasoline	117	41	434	—	18	610	10	3	1,007
Refinery Olefins	641	391	2,677	2	7	3,718	135	117	4,815
Ethylene	0	—	—	—	—	0	—	—	0
Propylene	634	62	712	2	0	1,410	0	11	2,050
Normal Butylene	7	329	1,965	0	7	2,308	135	106	2,765
Isobutylene	0	0	0	0	0	0	0	0	0
Oxygenates/Renewable Fuels/Other Hydrocarbons ...	47	66	321	84	17	535	185	320	1,378
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	47	66	321	84	17	535	185	320	1,356
Fuel Ethanol	39	45	90	34	13	221	113	28	636
Renewable Diesel Fuel ²	8	21	231	50	4	314	72	292	720
Other Renewable Fuels	—	—	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	—	—	—	—	—	22
Unfinished Oils	3,000	23,229	17,638	1,137	700	45,704	3,589	18,874	87,075
Naphthas and Lighter	1,374	6,692	2,654	260	300	11,280	820	2,926	20,038
Kerosene and Light Gas Oils	387	3,915	2,438	236	205	7,181	810	3,927	14,900
Heavy Gas Oils	516	9,598	9,090	583	195	19,982	1,099	9,500	38,429
Residuum	723	3,024	3,456	58	—	7,261	860	2,521	13,708
Motor Gasoline Blending Components (MGBC)	2,763	12,641	12,428	368	431	28,631	2,888	14,240	62,674
Reformulated - RBOB	200	1,311	263	—	—	1,774	—	5,222	8,933
Conventional	2,563	11,330	12,165	368	431	26,857	2,888	9,018	53,741
CBOB	1,305	3,697	5,954	287	89	11,332	1,530	2,226	20,679
GTAB	—	—	—	—	—	—	—	—	—
Other	1,258	7,633	6,211	81	342	15,525	1,358	6,792	33,062
Aviation Gasoline Blending Components	22	—	27	—	—	49	—	—	49
Finished Motor Gasoline	138	1,220	2,157	15	—	3,530	595	705	6,300
Reformulated	—	—	—	—	—	—	—	16	16
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—	—	16	16
Reformulated Other	—	—	—	—	—	—	—	—	—
Conventional	138	1,220	2,157	15	—	3,530	595	689	6,284
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—	51	—	51
Ed55 and Lower	—	—	—	—	—	—	51	—	51
Greater than Ed55	—	—	—	—	—	—	—	—	—
Conventional Other	138	1,220	2,157	15	—	3,530	544	689	6,233
Finished Aviation Gasoline	47	162	143	—	—	352	7	32	450
Kerosene-Type Jet Fuel	313	3,612	2,107	95	—	6,127	279	3,994	12,918
Kerosene	21	5	111	7	—	144	1	1	399
Distillate Fuel Oil	798	7,050	6,666	411	77	15,002	1,406	5,153	29,252
15 ppm sulfur and under	777	5,733	5,038	256	77	11,881	1,129	4,544	24,239
Greater than 15 ppm to 500 ppm sulfur	21	87	685	78	—	871	173	262	1,690
Greater than 500 ppm sulfur	—	1,230	943	77	—	2,250	104	347	3,323
Residual Fuel Oil	87	2,073	1,207	18	69	3,454	209	2,185	7,641
Less than 0.31 percent sulfur	10	—	64	—	—	74	32	—	488
0.31 to 1.00 percent sulfur	—	83	92	18	—	193	5	146	530
Greater than 1.00 percent sulfur	77	1,990	1,051	—	69	3,187	172	2,039	6,623
Petrochemical Feedstocks	104	1,868	630	23	—	2,625	—	7	3,219
Naphtha for Petro. Feed. Use	26	1,108	576	23	—	1,733	—	7	2,226
Other Oils for Petro. Feed. Use	78	760	54	—	—	892	—	—	993
Special Naphthas	95	616	—	121	—	832	—	36	985
Lubricants	59	2,724	2,305	906	—	5,994	—	428	7,443
Waxes	—	88	114	80	—	282	—	—	702
Petroleum Coke	32	3,915	1,339	—	—	5,286	161	1,473	8,758
Marketable	32	3,915	1,339	—	—	5,286	161	1,473	8,758
Catalyst	—	—	—	—	—	—	—	—	—
Asphalt and Road Oil	244	21	591	844	80	1,780	826	563	7,745
Miscellaneous Products	15	231	130	1	28	405	20	66	624
Total Stocks, All Oils	12,813	86,895	71,113	5,361	1,956	178,138	13,575	72,102	349,617

— = No Data Reported.

¹ Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

² Renewable diesel fuel includes biodiesel and other renewable diesel.

Note: Refer to Appendix A for Refining District descriptions.

Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report."

Table 35. Percent Yield of Petroleum Products by PAD and Refining Districts, October 2019

Commodity	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Hydrocarbon Gas Liquids	3.2	-0.9	2.7	1.1	0.2	0.6	0.9
Finished Motor Gasoline ¹	49.3	39.2	48.1	53.3	47.7	50.5	52.0
Finished Aviation Gasoline ²	—	—	—	—	0.3	—	0.0
Kerosene-Type Jet Fuel	10.7	—	9.4	8.6	6.5	3.7	7.2
Kerosene	0.6	—	0.6	0.3	—	0.1	0.2
Distillate Fuel Oil ³	28.5	27.7	28.4	26.0	33.5	38.9	29.8
Residual Fuel Oil	3.1	0.1	2.7	1.5	1.7	0.3	1.2
Naphtha for Petro. Feed. Use	0.0	—	0.0	0.8	—	—	0.5
Other Oils for Petro. Feed. Use	—	—	—	0.5	—	0.1	0.3
Special Naphthas	—	0.7	0.1	-0.1	—	0.3	0.0
Lubricants	1.1	6.0	1.7	—	—	0.7	0.2
Waxes	—	0.3	0.0	—	—	0.1	0.0
Petroleum Coke	3.7	0.7	3.3	5.2	4.7	3.2	4.7
Asphalt and Road Oil	2.0	23.5	4.6	5.0	8.2	1.8	4.7
Still Gas	4.2	1.4	3.9	3.5	4.0	3.9	3.6
Miscellaneous Products	0.3	1.0	0.4	0.4	0.5	0.2	0.4
Processing Gain(-) or Loss(+) ⁴	-6.7	0.3	-5.9	-6.0	-7.3	-4.3	-5.7

Commodity	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Hydrocarbon Gas Liquids	1.5	3.8	4.1	0.2	0.0	3.6	0.6	1.7	2.6
Finished Motor Gasoline ¹	53.2	45.4	43.3	29.0	49.3	44.7	50.6	49.8	47.5
Finished Aviation Gasoline ²	0.2	0.1	0.1	—	—	0.1	0.0	—	0.1
Kerosene-Type Jet Fuel	6.8	10.3	11.1	2.9	—	10.0	5.8	17.3	10.3
Kerosene	0.0	0.1	0.0	0.4	—	0.0	—	0.0	0.1
Distillate Fuel Oil ³	33.1	31.3	31.7	34.5	34.0	31.7	31.8	20.8	29.5
Residual Fuel Oil	1.8	0.8	2.2	0.0	2.4	1.5	2.2	5.3	2.1
Naphtha for Petro. Feed. Use	0.6	1.8	1.0	—	—	1.3	—	0.0	0.8
Other Oils for Petro. Feed. Use	0.1	1.4	1.3	—	—	1.2	—	—	0.7
Special Naphthas	0.2	0.5	—	3.2	—	0.4	—	0.0	0.2
Lubricants	0.1	1.3	1.5	13.0	—	1.6	—	0.6	1.1
Waxes	—	0.0	0.0	0.2	—	0.0	—	—	0.0
Petroleum Coke	1.7	6.0	5.2	3.0	1.1	5.2	3.8	5.7	5.0
Asphalt and Road Oil	1.1	0.2	0.6	11.2	0.7	0.7	5.5	1.1	2.0
Still Gas	3.3	4.2	3.7	3.3	2.7	3.9	3.5	4.3	3.9
Miscellaneous Products	0.6	0.6	0.5	0.0	1.0	0.5	0.7	0.6	0.5
Processing Gain(-) or Loss(+) ⁴	-4.2	-7.8	-6.4	-1.1	8.4	-6.6	-4.4	-7.2	-6.4

— = No Data Reported.

¹ Based on net production of finished motor gasoline minus input of natural gas plant liquids, fuel ethanol, oxygenates, and net input of motor gasoline blending components.

² Based on finished aviation gasoline net production minus net input of aviation gasoline blending components.

³ Based on distillate fuel oil net production minus input of biodiesel, "other" renewable diesel fuels, and "other" renewable fuels.

⁴ Represents the arithmetic difference between input and production.

Note: Percent yield is calculated as net production (or adjusted net production) divided by input of crude oil, hydrogen, "other" hydrocarbons, and net input of unfinished oils.

Note: Totals may not equal sum of components due to independent rounding.

Note: Refer to Appendix A for Refining District descriptions.

Source: Calculated from data on Tables 30 and 31.

Table 36. Imports of Residual Fuel Oil by Sulfur Content and by PAD District and State of Entry, October 2019
(Thousand Barrels)

PAD District and State of Entry	Residual Fuel Oil		
	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
PAD District 1	880	933	1,813
Connecticut	—	—	—
Delaware	—	—	—
Florida	—	331	331
Georgia	—	102	102
Maine	—	—	—
Maryland	187	—	187
Massachusetts	—	—	—
New Hampshire	—	—	—
New Jersey	632	500	1,132
New York	60	—	60
North Carolina	—	—	—
Pennsylvania	—	—	—
Rhode Island	—	—	—
South Carolina	—	—	—
Vermont	1	—	1
Virginia	—	—	—
West Virginia	—	—	—
PAD District 2	28	157	185
Illinois	—	—	—
Indiana	—	—	—
Michigan	—	106	106
Minnesota	21	51	72
North Dakota	7	—	7
Ohio	—	—	—
Wisconsin	—	—	—
PAD District 3	608	798	1,406
Alabama	—	—	—
Louisiana	456	—	456
Mississippi	—	—	—
New Mexico	—	—	—
Texas	152	798	950
PAD District 4	—	—	—
Idaho	—	—	—
Montana	—	—	—
PAD District 5	123	66	189
Alaska	—	—	—
California	—	—	—
Hawaii	—	—	—
Oregon	—	66	66
Washington	123	—	123
U.S. Total	1,639	1,954	3,593

— = No Data Reported.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 37. Imports of Crude Oil and Petroleum Products by PAD District, October 2019
(Thousand Barrels, Except Where Noted)

Commodity	PAD Districts					U.S. Total	
	1	2	3	4	5	Total	Daily Average
Crude Oil^{1,2}	17,733	75,736	47,002	9,284	43,789	193,544	6,243
Hydrocarbon Gas Liquids	1,294	2,324	76	458	1,815	5,967	192
Natural Gas Liquids	1,011	2,069	—	458	1,815	5,353	173
Ethane	—	—	—	—	—	—	—
Propane	789	1,243	—	317	1,047	3,396	110
Normal Butane	136	662	—	110	753	1,661	54
Isobutane	86	160	—	31	15	292	9
Natural Gasoline	—	4	—	—	—	4	0
Refinery Olefins	283	255	76	—	—	614	20
Ethylene	—	—	—	—	—	—	—
Propylene	283	196	—	—	—	479	15
Normal Butylene	—	59	76	—	—	135	4
Isobutylene	—	—	—	—	—	—	—
Other Liquids	19,207	171	19,596	96	4,729	43,799	1,413
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	151	99	171	38	1,244	1,703	55
Hydrogen	—	—	—	—	—	—	—
Oxygenates (excluding Fuel Ethanol)	—	—	159	—	—	159	5
Methyl Tertiary Butyl Ether (MTBE)	—	—	26	—	—	26	1
Other Oxygenates ³	—	—	133	—	—	133	4
Renewable Fuels (including Fuel Ethanol)	151	99	—	38	1,244	1,532	49
Fuel Ethanol	—	—	—	—	522	522	17
Biodiesel	151	99	—	38	26	314	10
Other Renewable Diesel Fuel	—	—	—	—	696	696	22
Other Renewable Fuels	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	12	—	—	12	0
Unfinished Oils ¹	3,052	—	18,044	—	2,536	23,632	762
Naphthas and Lighter	950	—	323	—	—	1,273	41
Kerosene and Lighter Gas Oils	—	—	18	—	—	18	1
Heavy Gas Oils	2,102	—	8,179	—	2,536	12,817	413
Residuum	—	—	9,524	—	—	9,524	307
Motor Gasoline Blend Comp. (MGBC)	16,004	72	1,381	58	949	18,464	596
Reformulated - RBOB	8,905	—	—	—	—	8,905	287
Conventional	7,099	72	1,381	58	949	9,559	308
CBOB	641	63	—	—	—	704	23
GTAB	914	—	—	—	—	914	29
Other	5,544	9	1,381	58	949	7,941	256
Aviation Gasoline Blend. Comp.	—	—	—	—	—	—	—
Finished Petroleum Products	12,159	988	4,022	232	5,255	22,656	731
Finished Motor Gasoline	2,576	—	—	7	964	3,547	114
Reformulated	—	—	—	—	—	—	—
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—	—
Reformulated Other	—	—	—	—	—	—	—
Conventional	2,576	—	—	7	964	3,547	114
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—	—
Ed55 and Lower	—	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—	—
Conventional Other	2,576	—	—	7	964	3,547	114
Finished Aviation Gasoline	1	7	23	—	3	34	1
Kerosene-Type Jet Fuel	1,156	—	—	—	3,438	4,594	148
Bonded Aircraft Fuel	321	—	—	—	875	1,196	39
Other	835	—	—	—	2,563	3,398	110
Kerosene	287	—	—	—	—	287	9
Distillate Fuel Oil	4,774	87	—	174	468	5,503	178
15 ppm sulfur and under	4,756	75	—	174	467	5,472	177
Bonded	—	—	—	—	—	—	—
Other	4,756	75	—	174	467	5,472	177
Greater than 15 ppm to 500 ppm sulfur	6	—	—	—	—	6	0
Bonded	—	—	—	—	—	—	—
Other	6	—	—	—	—	6	0
Greater than 500 ppm to 2000 ppm sulfur	12	12	—	—	1	25	1
Bonded	—	—	—	—	—	—	—
Other	12	12	—	—	1	25	1
Greater than 2000 ppm	—	—	—	—	—	—	—
Bonded	—	—	—	—	—	—	—
Other	—	—	—	—	—	—	—
Residual Fuel Oil	1,813	185	1,406	—	189	3,593	116
Less than 0.31 percent sulfur	—	—	—	—	—	—	—
0.31 to 1.00 percent sulfur	880	28	608	—	123	1,639	53
Greater than 1.00 percent sulfur	933	157	798	—	66	1,954	63
Petrochemical Feedstocks	4	132	164	—	35	335	11
Naphtha for Petro. Feed. Use	4	77	164	—	35	280	9
Other Oils for Petro. Feed. Use	—	55	—	—	—	55	2
Special Naphthas	—	4	534	—	—	538	17
Lubricants	492	134	1,667	—	25	2,318	75
Waxes	72	21	40	—	56	189	6
Petroleum Coke (Marketable)	1	32	188	—	29	250	8
Asphalt and Road Oil	983	386	—	50	48	1,467	47
Miscellaneous Products	—	—	—	1	—	1	0
Total	50,393	79,219	70,696	10,070	55,588	265,966	8,580

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 38. Year-to-Date Imports of Crude Oil and Petroleum Products by PAD District, January-October 2019
(Thousand Barrels)

Commodity	PAD Districts					U.S. Total	
	1	2	3	4	5	Total	Daily Average
Crude Oil^{1,2}	219,965	774,528	611,971	94,171	393,294	2,093,929	6,888
Hydrocarbon Gas Liquids	14,143	26,685	1,084	3,641	16,252	61,805	203
Natural Gas Liquids	11,639	23,933	—	3,641	16,252	55,465	182
Ethane	—	—	—	—	—	—	—
Propane	9,500	16,541	—	2,924	10,125	39,090	129
Normal Butane	597	5,510	—	533	5,644	12,284	40
Isobutane	1,542	1,834	—	184	483	4,043	13
Natural Gasoline	—	48	—	—	—	48	0
Refinery Olefins	2,504	2,752	1,084	—	—	6,340	21
Ethylene	—	—	—	—	—	—	—
Propylene	2,504	2,116	—	—	—	4,620	15
Normal Butylene	—	606	1,084	—	—	1,690	6
Isobutylene	—	—	—	—	—	30	0
Other Liquids	198,354	3,717	170,254	1,438	49,022	422,785	1,391
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	1,481	832	1,299	179	9,370	13,161	43
Hydrogen	—	—	—	—	—	—	—
Oxygenates (excluding Fuel Ethanol)	—	—	1,025	—	—	1,025	3
Methyl Tertiary Butyl Ether (MTBE)	—	—	240	—	—	240	1
Other Oxygenates ³	—	—	785	—	—	785	3
Renewable Fuels (including Fuel Ethanol)	1,481	832	235	179	9,370	12,097	40
Fuel Ethanol	—	—	—	—	3,986	3,986	13
Biodiesel	1,481	832	235	179	425	3,152	10
Other Renewable Diesel Fuel	—	—	—	—	4,959	4,959	16
Other Renewable Fuels	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	39	—	—	39	0
Unfinished Oils ¹	16,110	315	147,976	—	26,789	191,190	629
Naphthas and Lighter	5,512	88	2,582	—	684	8,866	29
Kerosene and Lighter Gas Oils	—	—	240	—	—	240	1
Heavy Gas Oils	10,598	227	88,624	—	24,498	123,947	408
Residuum	—	—	56,530	—	1,607	58,137	191
Motor Gasoline Blend Comp. (MGBC)	180,763	2,570	20,979	1,259	12,863	218,434	719
Reformulated - RBOB	54,051	—	581	—	2,255	56,887	187
Conventional	126,712	2,570	20,398	1,259	10,608	161,547	531
CBOB	11,415	632	—	—	1,371	13,418	44
GTAB	29,637	—	907	—	607	31,151	102
Other	85,660	1,938	19,491	1,259	8,630	116,978	385
Aviation Gasoline Blend Comp.	—	—	—	—	—	—	—
Finished Petroleum Products	116,184	9,524	37,596	1,694	50,924	215,922	710
Finished Motor Gasoline	19,321	1	785	72	4,915	25,094	83
Reformulated	—	—	—	—	—	—	—
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—	—
Reformulated Other	—	—	—	—	—	—	—
Conventional	19,321	1	785	72	4,915	25,094	83
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—	—
Ed55 and Lower	—	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—	—
Conventional Other	19,321	1	785	72	4,915	25,094	83
Finished Aviation Gasoline	123	37	82	17	33	292	1
Kerosene-Type Jet Fuel	16,770	—	30	—	33,875	50,675	167
Bonded Aircraft Fuel	4,125	—	—	—	13,427	17,552	58
Other	12,645	—	30	—	20,448	33,123	109
Kerosene	388	—	—	—	—	388	1
Distillate Fuel Oil	45,763	2,738	1,813	1,188	4,156	55,658	183
15 ppm sulfur and under	43,853	2,003	516	1,188	4,146	51,706	170
Bonded	—	—	—	—	—	—	—
Other	43,853	2,003	516	1,188	4,146	51,706	170
Greater than 15 ppm to 500 ppm sulfur	651	—	—	—	—	651	2
Bonded	—	—	—	—	—	—	—
Other	651	—	—	—	—	651	2
Greater than 500 ppm to 2000 ppm sulfur	778	485	261	—	10	1,534	5
Bonded	—	—	—	—	—	—	—
Other	778	485	261	—	10	1,534	5
Greater than 2000 ppm	481	250	1,036	—	—	1,767	6
Bonded	—	—	—	—	—	—	—
Other	481	250	1,036	—	—	1,767	6
Residual Fuel Oil	21,625	812	14,927	97	5,296	42,757	141
Less than 0.31 percent sulfur	996	—	2,480	—	338	3,814	13
0.31 to 1.00 percent sulfur	2,882	221	1,685	—	1,929	6,717	22
Greater than 1.00 percent sulfur	17,747	591	10,762	97	3,029	32,226	106
Petrochemical Feedstocks	26	1,498	3,166	—	304	4,994	16
Naphtha for Petro. Feed. Use	12	798	3,006	—	304	4,120	14
Other Oils for Petro. Feed. Use	14	700	160	—	—	874	3
Special Naphthas	8	53	4,961	—	—	5,022	17
Lubricants	2,495	1,207	10,114	1	583	14,400	47
Waxes	687	62	269	—	536	1,554	5
Petroleum Coke (Marketable)	25	286	1,394	—	256	1,961	6
Asphalt and Road Oil	8,953	2,830	55	309	970	13,117	43
Miscellaneous Products	—	—	—	10	—	10	0
Total	548,646	814,454	820,905	100,944	509,492	2,794,441	9,192

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 39. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, October 2019
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	37,142	90	-	2,002	-	-	-	-	351	351
Algeria	-	-	-	723	-	-	-	-	-	-
Angola	1,670	-	-	-	-	-	-	-	276	276
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	7,441	-	-	-	-	-	-	-	-	-
Equatorial Guinea	663	90	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	7,822	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-
Libya	2,669	-	-	-	-	-	-	-	-	-
Nigeria	3,884	-	-	-	-	-	-	-	75	75
Saudi Arabia	12,993	-	-	736	-	-	-	-	-	-
United Arab Emirates	-	-	-	543	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-
Non-OPEC	156,402	5,263	614	21,630	-	3,547	3,547	8,905	9,208	18,113
Argentina	1,355	-	-	212	-	-	-	-	101	101
Aruba	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-
Bahamas	-	-	-	-	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	434	-	-	-	4	205	209
Brazil	7,005	-	-	111	-	-	-	-	973	973
Brunei	971	-	-	-	-	-	-	-	-	-
Cameroon	527	-	-	-	-	-	-	-	-	-
Canada	116,524	5,256	538	1,021	-	621	621	4,369	771	5,140
Chad	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-
Colombia	6,233	-	-	-	-	-	-	-	314	314
Denmark	-	-	-	-	-	-	-	-	-	-
Egypt	-	-	-	616	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	580	580	50	-	50
France	-	-	-	458	-	-	-	577	-	577
Germany	-	-	-	535	-	-	-	-	-	-
Guatemala	281	-	-	-	-	-	-	-	-	-
India	-	-	-	376	-	-	-	-	1,941	1,941
Indonesia	-	-	-	-	-	-	-	-	-	-
Italy	-	-	-	363	-	-	-	-	-	-
Korea, South	-	-	-	-	-	639	639	-	281	281
Latvia	-	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-	-	-
Mexico	15,212	-	-	967	-	-	-	-	323	323
Netherlands	-	-	-	529	-	321	321	977	1,016	1,993
Norway	279	-	-	822	-	-	-	-	93	93
Oman	-	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	253	253	-	-	-
Qatar	-	-	-	-	-	-	-	-	31	31
Russia	4,792	7	-	13,048	-	-	-	650	1,824	2,474
Spain	-	-	-	352	-	547	547	-	662	662
Sweden	-	-	-	83	-	-	-	-	-	-
Syria	-	-	-	-	-	-	-	-	-	-
Trinidad and Tobago	2,130	-	-	-	-	-	-	-	-	-
United Kingdom	884	-	-	-	-	586	586	2,278	-	2,278
Vietnam	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	-	-	-	-	-
Other	209	0	76	1,703	-	0	0	0	673	673
Total	193,544	5,353	614	23,632	-	3,547	3,547	8,905	9,559	18,464
Persian Gulf³	20,815	-	-	1,279	-	-	-	-	31	31

See footnotes at end of table.

Table 39. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, October 2019
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	—	—	—	—	—	—	—	—	—	—	—
Algeria	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—	—	—
Non-OPEC	26	133	522	314	696	—	5,472	6	25	—	5,503
Argentina	—	—	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—	—	—
Brazil	26	133	522	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	222	—	—	4,326	6	25	—	4,357
Chad	—	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	1,146	—	—	—	1,146
Denmark	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—	—	—
Germany	—	—	—	71	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	21	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	—	—	—	—
Spain	—	—	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—
Other	0	0	0	0	696	—	0	0	0	—	0
Total	26	133	522	314	696	—	5,472	6	25	—	5,503
Persian Gulf³	—	—	—	—	—	—	—	—	—	—	—

See footnotes at end of table.

Table 39. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, October 2019
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	—	—	—	220	37	—	374	—	374
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	374	—	374
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	220	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	37	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—
Non-OPEC	287	34	—	4,374	501	—	1,265	1,954	3,219
Argentina	—	—	—	—	—	—	545	—	545
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	422	—	422
Bahrain	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	40	—	—	2	2
Brunei	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—
Canada	—	11	—	520	86	—	216	275	491
Chad	—	—	—	—	—	—	—	—	—
China	—	—	—	310	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	501	501
Denmark	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	38	38
Estonia	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	10	—	10
Guatemala	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	2,624	375	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	423	423
Netherlands	—	—	—	—	—	—	64	17	81
Norway	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	256	256
Portugal	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	394	394
Spain	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—
Other	287	23	—	920	0	—	8	48	56
Total	287	34	—	4,594	538	—	1,639	1,954	3,593
Persian Gulf³	—	—	—	—	37	—	—	—	—

See footnotes at end of table.

Table 39. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, October 2019
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
OPEC	—	—	—	—	—	130	—	3,204	40,346	1,198	103	1,301
Algeria	—	—	—	—	—	—	—	723	723	—	23	23
Angola	—	—	—	—	—	—	—	650	2,320	54	21	75
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	220	7,661	240	7	247
Equatorial Guinea	—	—	—	—	—	—	—	90	753	21	3	24
Gabon	—	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	7,822	252	—	252
Kuwait	—	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	2,669	86	—	86
Nigeria	—	—	—	—	—	—	—	75	3,959	125	2	128
Saudi Arabia	—	—	—	—	—	—	—	773	13,766	419	25	444
United Arab Emirates	—	—	—	—	—	130	—	673	673	—	22	22
Venezuela	—	—	—	—	—	—	—	—	—	—	—	—
Non-OPEC	280	55	189	250	1,467	2,188	1	69,218	225,620	5,045	2,233	7,278
Argentina	—	—	—	—	—	1	—	859	2,214	44	28	71
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	422	422	—	14	14
Bahrain	—	—	—	—	—	98	—	98	98	—	3	3
Belgium	—	—	—	—	—	22	—	665	665	—	21	21
Brazil	—	—	—	188	—	—	—	1,995	9,000	226	64	290
Brunei	—	—	—	—	—	—	—	—	971	31	—	31
Cameroon	—	—	—	—	—	—	—	—	527	17	—	17
Canada	77	55	86	61	1,178	268	1	19,989	136,513	3,759	645	4,404
Chad	—	—	—	—	—	—	—	—	—	—	—	—
China	—	—	38	—	—	—	—	348	348	—	11	11
Colombia	—	—	—	—	55	—	—	2,016	8,249	201	65	266
Denmark	—	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	654	654	—	21	21
Estonia	—	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	630	630	—	20	20
France	—	—	—	—	—	14	—	1,049	1,049	—	34	34
Germany	—	—	1	—	—	16	—	633	633	—	20	20
Guatemala	—	—	—	—	—	—	—	—	281	9	—	9
India	—	—	—	—	—	—	—	2,317	2,317	—	75	75
Indonesia	—	—	1	—	—	123	—	124	124	—	4	4
Italy	—	—	—	—	—	16	—	379	379	—	12	12
Korea, South	—	—	—	—	—	763	—	4,703	4,703	—	152	152
Latvia	—	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	2	—	—	1	—	3	3	—	0	0
Mexico	164	—	—	—	—	—	—	1,877	17,089	491	61	551
Netherlands	—	—	—	—	—	1	—	2,937	2,937	—	95	95
Norway	—	—	—	—	—	—	—	915	1,194	9	30	39
Oman	—	—	—	—	—	—	—	256	256	—	8	8
Portugal	—	—	—	—	—	—	—	253	253	—	8	8
Qatar	—	—	—	—	—	575	—	606	606	—	20	20
Russia	—	—	—	—	—	206	—	16,129	20,921	155	520	675
Spain	—	—	—	—	234	—	—	1,795	1,795	—	58	58
Sweden	—	—	—	—	—	84	—	167	167	—	5	5
Syria	—	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	2,130	69	—	69
United Kingdom	4	—	23	—	—	—	—	2,891	3,775	29	93	122
Vietnam	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—	—
Other	35	0	38	1	0	0	0	4,508	4,717	5	146	153
Total	280	55	189	250	1,467	2,318	1	72,422	265,966	6,243	2,336	8,580
Persian Gulf³	—	—	—	—	—	803	—	2,150	22,965	671	69	741

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 40. Year-to-Date Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, January-October 2019
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	462,852	164	—	34,762	—	81	81	100	7,420	7,520
Algeria	6,413	—	—	20,157	—	—	—	—	—	—
Angola	10,960	—	—	768	—	—	—	—	759	759
Congo (Brazzaville)	5,537	—	—	173	—	—	—	—	—	—
Ecuador	57,399	—	—	1,220	—	—	—	—	—	—
Equatorial Guinea	3,286	164	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—
Iraq	101,956	—	—	312	—	—	—	—	—	—
Kuwait	13,911	—	—	—	—	—	—	—	—	—
Libya	18,245	—	—	1,123	—	—	—	—	—	—
Nigeria	56,874	—	—	360	—	—	—	—	1,617	1,617
Saudi Arabia	157,844	—	—	5,109	—	81	81	100	2,474	2,574
United Arab Emirates	1,026	—	—	5,495	—	—	—	—	1,264	1,264
Venezuela	29,401	—	—	45	—	—	—	—	1,306	1,306
Non-OPEC	1,631,077	55,301	6,340	156,428	—	25,013	25,013	56,787	154,127	210,914
Argentina	11,079	254	—	212	—	—	—	—	680	680
Aruba	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	398	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	14,081	—	600	600	1,387	5,338	6,725
Brazil	38,763	—	—	1,266	—	—	—	—	16,869	16,869
Brunei	7,877	—	—	—	—	—	—	—	—	—
Cameroon	1,866	—	—	793	—	—	—	—	—	—
Canada	1,161,650	54,127	5,256	6,495	—	4,948	4,948	28,045	17,383	45,428
Chad	1,901	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	486	486
Colombia	99,977	—	—	676	—	—	—	—	4,277	4,277
Denmark	4,411	—	—	320	—	1	1	9	419	428
Egypt	4,380	—	—	11,414	—	138	138	—	337	337
Estonia	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	235	—	808	808	157	7,236	7,393
France	—	—	65	1,282	—	4,507	4,507	1,743	1,267	3,010
Germany	—	—	—	1,915	—	72	72	3	720	723
Guatemala	2,204	—	—	—	—	—	—	—	—	—
India	—	—	—	2,238	—	—	—	—	21,585	21,585
Indonesia	—	—	—	—	—	—	—	—	566	566
Italy	—	—	—	3,372	—	166	166	88	4,879	4,967
Korea, South	—	—	—	149	—	2,892	2,892	—	2,142	2,142
Latvia	—	—	—	—	—	—	—	—	69	69
Lithuania	—	—	—	19	—	—	—	—	1,170	1,170
Malaysia	—	—	—	289	—	—	—	—	243	243
Mexico	183,333	—	193	967	—	—	—	—	1,539	1,539
Netherlands	486	—	—	3,493	—	2,456	2,456	10,184	15,469	25,653
Norway	16,115	309	—	5,113	—	396	396	622	6,019	6,641
Oman	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	253	253	837	7,023	7,860
Qatar	—	—	—	—	—	—	—	—	67	67
Russia	40,892	7	—	82,438	—	851	851	812	12,957	13,769
Spain	194	—	—	3,066	—	1,408	1,408	1	8,496	8,497
Sweden	—	191	—	1,625	—	313	313	35	893	928
Syria	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	13,659	—	—	—	—	—	—	—	350	350
United Kingdom	20,862	192	—	1,934	—	4,591	4,591	12,796	5,603	18,399
Vietnam	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—
Other	21,428	221	826	12,638	—	613	613	68	10,045	10,113
Total	2,093,929	55,465	6,340	191,190	—	25,094	25,094	56,887	161,547	218,434
Persian Gulf³	274,737	—	—	10,916	—	81	81	100	3,805	3,905

See footnotes at end of table.

Table 40. Year-to-Date Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, January-October 2019
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	—	—	—	—	—	—	1,999	—	—	156	2,155
Algeria	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	156	156
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	312	—	—	—	312
Saudi Arabia	—	—	—	—	—	—	1,193	—	—	—	1,193
United Arab Emirates	—	—	—	—	—	—	200	—	—	—	200
Venezuela	—	—	—	—	—	—	294	—	—	—	294
Non-OPEC	240	785	3,986	3,152	4,959	—	49,707	651	1,534	1,611	53,503
Argentina	214	—	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	501	—	—	396	897
Bahrain	—	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	143	—	—	—	—	—	—	—
Brazil	26	785	3,986	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	1,378	—	—	31,607	375	1,117	731	33,830
Chad	—	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	279	—	—	—	279
Colombia	—	—	—	—	—	—	7,112	—	—	—	7,112
Denmark	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—	—
France	—	—	—	121	—	—	—	—	—	—	—
Germany	—	—	—	997	—	—	—	—	106	—	106
Guatemala	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	6,477	—	—	—	6,477
Indonesia	—	—	—	—	—	—	312	—	—	—	312
Italy	—	—	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	314	—	—	518	—	—	—	518
Latvia	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	464	—	—	—	464
Mexico	—	—	—	—	—	—	—	—	125	—	125
Netherlands	—	—	—	—	—	—	—	—	186	—	186
Norway	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	2,071	—	—	—	2,071
Russia	—	—	—	—	—	—	366	276	—	484	1,126
Spain	—	—	—	170	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—
Other	0	0	0	29	4,959	—	0	0	0	0	0
Total	240	785	3,986	3,152	4,959	—	51,706	651	1,534	1,767	55,658
Persian Gulf³	—	—	—	—	—	—	3,464	—	—	—	3,464

See footnotes at end of table.

Table 40. Year-to-Date Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, January-October 2019
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	—	—	—	1,742	37	—	374	3,394	3,768
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	374	—	374
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	220	—	—	—	282	282
Equatorial Guinea	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	24	—	—	—	—	—
Kuwait	—	—	—	101	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	20	—	—	—	—	—
Saudi Arabia	—	—	—	618	37	—	—	679	679
United Arab Emirates	—	—	—	658	—	—	—	20	20
Venezuela	—	—	—	101	—	—	—	2,413	2,413
Non-OPEC	388	292	—	48,933	4,985	3,814	6,343	28,832	38,989
Argentina	—	—	—	—	—	939	1,647	—	2,586
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	422	562	984
Bahrain	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	9	285	—	68	414	482
Brunei	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—
Canada	—	88	—	6,645	746	356	2,552	7,093	10,001
Chad	—	—	—	—	—	—	—	—	—
China	—	—	—	1,594	—	—	—	—	—
Colombia	101	—	—	—	—	560	40	4,013	4,613
Denmark	—	—	—	70	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	38	38
Estonia	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—
France	—	—	—	—	37	—	—	—	—
Germany	—	—	—	—	—	—	10	—	10
Guatemala	—	—	—	—	—	—	—	—	—
India	—	—	—	613	197	—	—	4	4
Indonesia	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—
Korea, South	—	10	—	28,164	2,557	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	6	228	749	20	7,236	8,005
Netherlands	—	171	—	—	13	—	182	942	1,124
Norway	—	—	—	—	—	—	—	244	244
Oman	—	—	—	—	—	—	—	256	256
Portugal	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	484	—	—	—	—	—
Russia	—	—	—	—	13	872	199	6,566	7,637
Spain	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	286	286
Syria	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—
Other	287	23	—	11,348	909	338	1,203	1,178	2,719
Total	388	292	—	50,675	5,022	3,814	6,717	32,226	42,757
Persian Gulf³	—	—	—	1,885	37	—	—	699	699

See footnotes at end of table.

Table 40. Year-to-Date Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, January-October 2019
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
OPEC	—	—	—	—	31	1,390	—	51,650	514,502	1,523	170	1,692
Algeria	—	—	—	—	—	410	—	20,567	26,980	21	68	89
Angola	—	—	—	—	—	—	—	1,901	12,861	36	6	42
Congo (Brazzaville)	—	—	—	—	—	—	—	173	5,710	18	1	19
Ecuador	—	—	—	—	—	—	—	1,878	59,277	189	6	195
Equatorial Guinea	—	—	—	—	—	—	—	164	3,450	11	1	11
Gabon	—	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	336	102,292	335	1	336
Kuwait	—	—	—	—	—	—	—	101	14,012	46	0	46
Libya	—	—	—	—	—	—	—	1,123	19,368	60	4	64
Nigeria	—	—	—	—	—	—	—	2,309	59,183	187	8	195
Saudi Arabia	—	—	—	—	—	—	—	10,291	168,135	519	34	553
United Arab Emirates	—	—	—	—	—	980	—	8,617	9,643	3	28	32
Venezuela	—	—	—	—	31	—	—	4,190	33,591	97	14	110
Non-OPEC	4,120	874	1,554	1,961	13,086	13,010	10	648,862	2,279,939	5,365	2,134	7,500
Argentina	—	—	—	768	—	25	—	4,739	15,818	36	16	52
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	398	398	—	1	1
Bahamas	—	—	—	—	—	—	—	1,881	1,881	—	6	6
Bahrain	—	—	—	—	—	710	—	710	710	—	2	2
Belgium	1	—	—	—	84	131	—	21,765	21,765	—	72	72
Brazil	—	9	—	188	—	—	—	23,905	62,668	128	79	206
Brunei	—	—	—	—	—	—	—	—	7,877	26	—	26
Cameroon	—	—	—	—	—	—	—	793	2,659	6	3	9
Canada	798	714	469	530	10,694	2,380	10	184,537	1,346,187	3,821	607	4,428
Chad	—	—	—	—	—	—	—	—	1,901	6	—	6
China	—	—	618	—	—	—	—	2,977	2,977	—	10	10
Colombia	—	—	—	—	94	—	—	16,873	116,850	329	56	384
Denmark	—	—	—	—	—	—	—	819	5,230	15	3	17
Egypt	—	—	—	—	—	—	—	11,927	16,307	14	39	54
Estonia	—	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	15	—	8,451	8,451	—	28	28
France	—	148	—	—	—	140	—	9,310	9,310	—	31	31
Germany	—	—	45	—	—	183	—	4,051	4,051	—	13	13
Guatemala	—	—	—	—	—	—	—	—	2,204	7	—	7
India	—	—	—	—	—	1	—	31,115	31,115	—	102	102
Indonesia	—	—	2	—	—	799	—	1,679	1,679	—	6	6
Italy	34	—	—	—	—	167	—	8,708	8,708	—	29	29
Korea, South	14	—	6	—	130	3,948	—	40,844	40,844	—	134	134
Latvia	—	—	—	—	—	—	—	69	69	—	0	0
Lithuania	—	—	—	—	—	—	—	1,189	1,189	—	4	4
Malaysia	—	—	90	—	65	4	—	1,155	1,155	—	4	4
Mexico	1,960	—	—	—	—	—	—	13,023	196,356	603	43	646
Netherlands	—	—	—	—	—	33	—	33,153	33,639	2	109	111
Norway	—	—	—	—	—	—	—	12,703	28,818	53	42	95
Oman	—	—	—	411	—	—	—	667	667	—	2	2
Portugal	—	—	—	—	—	10	—	8,123	8,123	—	27	27
Qatar	—	—	—	—	—	3,507	—	6,129	6,129	—	20	20
Russia	—	—	—	—	—	429	—	106,270	147,162	135	350	484
Spain	—	—	8	—	1,150	—	—	14,299	14,493	1	47	48
Sweden	—	—	—	19	—	93	—	3,455	3,455	—	11	11
Syria	—	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	350	14,009	45	1	46
United Kingdom	244	—	23	24	—	156	—	25,563	46,425	69	84	153
Vietnam	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—	—
Other	1,069	3	293	21	869	279	0	47,232	68,660	69	153	226
Total	4,120	874	1,554	1,961	13,117	14,400	10	700,512	2,794,441	6,888	2,304	9,192
Persian Gulf³	—	—	—	—	—	5,197	—	26,184	300,921	904	86	990

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 41. PAD District 1 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2019
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	6,116	—	—	—	—	—	—	—	351	351
Algeria	—	—	—	—	—	—	—	—	—	—
Angola	50	—	—	—	—	—	—	—	276	276
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—
Libya	602	—	—	—	—	—	—	—	—	—
Nigeria	2,416	—	—	—	—	—	—	—	75	75
Saudi Arabia	3,048	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—	—
Non-OPEC	11,617	1,011	283	3,052	—	2,576	2,576	8,905	6,748	15,653
Argentina	—	—	—	212	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	4	96	100
Brazil	—	—	—	111	—	—	—	—	908	908
Brunei	—	—	—	—	—	—	—	—	—	—
Cameroon	527	—	—	—	—	—	—	—	—	—
Canada	8,074	1,011	283	272	—	542	542	4,369	641	5,010
Chad	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	—	314	314
Denmark	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	580	580	50	—	50
France	—	—	—	—	—	—	—	577	—	577
Germany	—	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	1,173	1,173
Indonesia	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—	—
Mexico	200	—	—	667	—	—	—	—	—	—
Netherlands	—	—	—	—	—	321	321	977	1,006	1,983
Norway	279	—	—	167	—	—	—	—	93	93
Oman	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—	—
Russia	1,653	—	—	1,080	—	—	—	650	1,712	2,362
Spain	—	—	—	152	—	547	547	—	662	662
Sweden	—	—	—	83	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—
United Kingdom	884	—	—	—	—	586	586	2,278	—	2,278
Vietnam	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—
Other	0	0	0	308	—	0	0	0	143	143
Total	17,733	1,011	283	3,052	—	2,576	2,576	8,905	7,099	16,004
Persian Gulf³	3,048	—	—	—	—	—	—	—	—	—

See footnotes at end of table.

Table 41. PAD District 1 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2019
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	-	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-	-
Equatorial Guinea	-	-	-	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	-	-	-	151	-	-	4,756	6	12	-	4,774
Argentina	-	-	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-	-
Bahamas	-	-	-	-	-	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-	-	-
Brazil	-	-	-	-	-	-	-	-	-	-	-
Brunei	-	-	-	-	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-	-	-	-
Canada	-	-	-	80	-	-	3,610	6	12	-	3,628
Chad	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-
Colombia	-	-	-	-	-	-	1,146	-	-	-	1,146
Denmark	-	-	-	-	-	-	-	-	-	-	-
Egypt	-	-	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	71	-	-	-	-	-	-	-
Guatemala	-	-	-	-	-	-	-	-	-	-	-
India	-	-	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-	-	-
Korea, South	-	-	-	-	-	-	-	-	-	-	-
Latvia	-	-	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-	-
Russia	-	-	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-	-	-
Syria	-	-	-	-	-	-	-	-	-	-	-
Trinidad and Tobago	-	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	0	-	-	0	0	0	-	0
Total	-	-	-	151	-	-	4,756	6	12	-	4,774
Persian Gulf³	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 41. PAD District 1 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2019
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	—	—	—	220	—	—	—	—	—
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	220	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—
Non-OPEC	287	1	—	936	—	—	880	933	1,813
Argentina	—	—	—	—	—	—	397	—	397
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	422	—	422
Bahrain	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	—	2	2
Brunei	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—
Canada	—	1	—	520	—	—	61	8	69
Chad	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	501	501
Denmark	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	101	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	174	174
Netherlands	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	200	200
Spain	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—
Other	287	0	—	315	—	—	0	48	48
Total	287	1	—	1,156	—	—	880	933	1,813
Persian Gulf³	—	—	—	—	—	—	—	—	—

See footnotes at end of table.

Table 41. PAD District 1 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2019
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
OPEC	—	—	—	—	—	—	—	571	6,687	197	18	216
Algeria	—	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	276	326	2	9	11
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	220	220	—	7	7
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	602	19	—	19
Nigeria	—	—	—	—	—	—	—	75	2,491	78	2	80
Saudi Arabia	—	—	—	—	—	—	—	—	3,048	98	—	98
United Arab Emirates	—	—	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—	—	—	—
Non-OPEC	4	—	72	1	983	492	—	32,089	43,706	375	1,035	1,410
Argentina	—	—	—	—	—	—	—	609	609	—	20	20
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	422	422	—	14	14
Bahrain	—	—	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	20	—	120	120	—	4	4
Brazil	—	—	—	—	—	—	—	1,021	1,021	—	33	33
Brunei	—	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	527	17	—	17
Canada	—	—	68	—	694	132	—	12,310	20,384	260	397	658
Chad	—	—	—	—	—	—	—	—	—	—	—	—
China	—	—	2	—	—	—	—	2	2	—	0	0
Colombia	—	—	—	—	55	—	—	2,016	2,016	—	65	65
Denmark	—	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	630	630	—	20	20
France	—	—	—	—	—	11	—	588	588	—	19	19
Germany	—	—	—	—	—	8	—	79	79	—	3	3
Guatemala	—	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	1,173	1,173	—	38	38
Indonesia	—	—	1	—	—	—	—	1	1	—	0	0
Italy	—	—	—	—	—	9	—	9	9	—	0	0
Korea, South	—	—	—	—	—	20	—	121	121	—	4	4
Latvia	—	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	1	—	1	1	—	0	0
Mexico	—	—	—	—	—	—	—	841	1,041	6	27	34
Netherlands	—	—	—	—	—	1	—	2,305	2,305	—	74	74
Norway	—	—	—	—	—	—	—	260	539	9	8	17
Oman	—	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	1	—	1	1	—	0	0
Russia	—	—	—	—	—	206	—	3,848	5,501	53	124	177
Spain	—	—	—	—	234	—	—	1,595	1,595	—	51	51
Sweden	—	—	—	—	—	83	—	166	166	—	5	5
Syria	—	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	4	—	—	—	—	—	—	2,868	3,752	29	93	121
Vietnam	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—	—
Other	0	—	1	1	0	0	—	1,103	1,103	1	36	36
Total	4	—	72	1	983	492	—	32,660	50,393	572	1,054	1,626
Persian Gulf³	—	—	—	—	—	1	—	1	3,049	98	0	98

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 42. PAD District 2 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2019
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-
Equatorial Guinea	-	-	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-
Non-OPEC	75,736	2,069	255	-	-	-	-	-	72	72
Argentina	-	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-
Bahamas	-	-	-	-	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-	-
Brazil	-	-	-	-	-	-	-	-	-	-
Brunei	-	-	-	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-	-	-
Canada	75,736	2,069	255	-	-	-	-	-	72	72
Chad	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-	-
Egypt	-	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-	-
Guatemala	-	-	-	-	-	-	-	-	-	-
India	-	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-	-
Korea, South	-	-	-	-	-	-	-	-	-	-
Latvia	-	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-
Russia	-	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-	-
Syria	-	-	-	-	-	-	-	-	-	-
Trinidad and Tobago	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	-	-	-	-	-
Other	0	0	0	-	-	-	-	-	0	0
Total	75,736	2,069	255	-	-	-	-	-	72	72
Persian Gulf³	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 42. PAD District 2 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2019
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	-	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-	-
Equatorial Guinea	-	-	-	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	-	-	-	99	-	-	75	-	12	-	87
Argentina	-	-	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-	-
Bahamas	-	-	-	-	-	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-	-	-
Brazil	-	-	-	-	-	-	-	-	-	-	-
Brunei	-	-	-	-	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-	-	-	-
Canada	-	-	-	99	-	-	75	-	12	-	87
Chad	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-	-	-
Egypt	-	-	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-	-	-
Guatemala	-	-	-	-	-	-	-	-	-	-	-
India	-	-	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-	-	-
Korea, South	-	-	-	-	-	-	-	-	-	-	-
Latvia	-	-	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-	-
Russia	-	-	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-	-	-
Syria	-	-	-	-	-	-	-	-	-	-	-
Trinidad and Tobago	-	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	0	-	-	0	-	0	-	0
Total	-	-	-	99	-	-	75	-	12	-	87
Persian Gulf³	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 42. PAD District 2 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2019
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	—	—	—	—	—	—	—	—	—
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—
Non-OPEC	—	7	—	—	4	—	28	157	185
Argentina	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—
Canada	—	7	—	—	4	—	28	157	185
Chad	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	—	—
Denmark	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	—	—
Spain	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—
Other	—	0	—	—	0	—	0	0	0
Total	—	7	—	—	4	—	28	157	185
Persian Gulf³	—	—	—	—	—	—	—	—	—

See footnotes at end of table.

Table 42. PAD District 2 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2019
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
OPEC	—	—	—	—	—	—	—	—	—	—	—	—
Algeria	—	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—	—	—	—
Non-OPEC	77	55	21	32	386	134	—	3,483	79,219	2,443	112	2,555
Argentina	—	—	—	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—	—
Canada	77	55	18	32	386	134	—	3,480	79,216	2,443	112	2,555
Chad	—	—	—	—	—	—	—	—	—	—	—	—
China	—	—	3	—	—	—	—	3	3	—	0	0
Colombia	—	—	—	—	—	—	—	—	—	—	—	—
Denmark	—	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	—	—	—	—	—
Spain	—	—	—	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—	—
Other	0	0	0	0	0	0	—	0	0	0	0	0
Total	77	55	21	32	386	134	—	3,483	79,219	2,443	112	2,555
Persian Gulf³	—	—	—	—	—	—	—	—	—	—	—	—

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 43. PAD District 3 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2019
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	6,303	—	—	1,623	—	—	—	—	—	—
Algeria	—	—	—	344	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—
Ecuador	1,528	—	—	—	—	—	—	—	—	—
Equatorial Guinea	663	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—
Iraq	1,010	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	3,102	—	—	736	—	—	—	—	—	—
United Arab Emirates	—	—	—	543	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—	—
Non-OPEC	40,699	—	76	16,421	—	—	—	—	1,381	1,381
Argentina	361	—	—	—	—	—	—	—	101	101
Aruba	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	434	—	—	—	—	—	—
Brazil	3,722	—	—	—	—	—	—	—	65	65
Brunei	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—
Canada	14,766	—	—	749	—	—	—	—	—	—
Chad	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—	—
Colombia	4,921	—	—	—	—	—	—	—	—	—
Denmark	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	616	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—
France	—	—	—	458	—	—	—	—	—	—
Germany	—	—	—	535	—	—	—	—	—	—
Guatemala	281	—	—	—	—	—	—	—	—	—
India	—	—	—	376	—	—	—	—	414	414
Indonesia	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—	—
Mexico	14,182	—	—	300	—	—	—	—	323	323
Netherlands	—	—	—	529	—	—	—	—	—	—
Norway	—	—	—	655	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	31	31
Russia	716	—	—	10,405	—	—	—	—	—	—
Spain	—	—	—	200	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	1,750	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—
Other	0	—	76	1,164	—	—	—	—	447	447
Total	47,002	—	76	18,044	—	—	—	—	1,381	1,381
Persian Gulf³	4,112	—	—	1,279	—	—	—	—	31	31

See footnotes at end of table.

Table 43. PAD District 3 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2019
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	—	—	—	—	—	—	—	—	—	—	—
Algeria	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—	—	—
Non-OPEC	26	133	—	—	—	—	—	—	—	—	—
Argentina	—	—	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—	—	—
Brazil	26	133	—	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	—	—	—	—	—	—	—	—
Chad	—	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	—	—	—	—
Denmark	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	—	—	—	—
Spain	—	—	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—
Other	0	0	—	—	—	—	—	—	—	—	—
Total	26	133	—	—	—	—	—	—	—	—	—
Persian Gulf³	—	—	—	—	—	—	—	—	—	—	—

See footnotes at end of table.

Table 43. PAD District 3 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2019
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	—	—	—	—	37	—	374	—	374
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	374	—	374
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	37	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—
Non-OPEC	—	23	—	—	497	—	234	798	1,032
Argentina	—	—	—	—	—	—	148	—	148
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	40	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—
Canada	—	—	—	—	82	—	4	44	48
Chad	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	—	—
Denmark	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	38	38
Estonia	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	10	—	10
Guatemala	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	375	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	249	249
Netherlands	—	—	—	—	—	—	64	17	81
Norway	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	256	256
Portugal	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	194	194
Spain	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—
Other	—	23	—	—	0	—	8	0	8
Total	—	23	—	—	534	—	608	798	1,406
Persian Gulf³	—	—	—	—	37	—	—	—	—

See footnotes at end of table.

Table 43. PAD District 3 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2019
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
OPEC	—	—	—	—	—	130	—	2,164	8,467	203	70	273
Algeria	—	—	—	—	—	—	—	344	344	—	11	11
Angola	—	—	—	—	—	—	—	374	374	—	12	12
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	1,528	49	—	49
Equatorial Guinea	—	—	—	—	—	—	—	—	663	21	—	21
Gabon	—	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	1,010	33	—	33
Kuwait	—	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	773	3,875	100	25	125
United Arab Emirates	—	—	—	—	—	130	—	673	673	—	22	22
Venezuela	—	—	—	—	—	—	—	—	—	—	—	—
Non-OPEC	164	—	40	188	—	1,537	—	21,530	62,229	1,313	695	2,007
Argentina	—	—	—	—	—	1	—	250	611	12	8	20
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	98	—	98	98	—	3	3
Belgium	—	—	—	—	—	2	—	436	436	—	14	14
Brazil	—	—	—	188	—	—	—	452	4,174	120	15	135
Brunei	—	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	—	—	—	—	879	15,645	476	28	505
Chad	—	—	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	—	4,921	159	—	159
Denmark	—	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	654	654	—	21	21
Estonia	—	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	3	—	461	461	—	15	15
Germany	—	—	—	—	—	8	—	553	553	—	18	18
Guatemala	—	—	—	—	—	—	—	—	281	9	—	9
India	—	—	—	—	—	—	—	790	790	—	25	25
Indonesia	—	—	—	—	—	123	—	123	123	—	4	4
Italy	—	—	—	—	—	7	—	7	7	—	0	0
Korea, South	—	—	—	—	—	720	—	1,095	1,095	—	35	35
Latvia	—	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	2	—	—	—	—	2	2	—	0	0
Mexico	164	—	—	—	—	—	—	1,036	15,218	457	33	491
Netherlands	—	—	—	—	—	—	—	622	622	—	20	20
Norway	—	—	—	—	—	—	—	655	655	—	21	21
Oman	—	—	—	—	—	—	—	256	256	—	8	8
Portugal	—	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	574	—	605	605	—	20	20
Russia	—	—	—	—	—	—	—	10,599	11,315	23	342	365
Spain	—	—	—	—	—	—	—	200	200	—	6	6
Sweden	—	—	—	—	—	1	—	1	1	—	0	0
Syria	—	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	1,750	56	—	56
United Kingdom	—	—	23	—	—	—	—	23	23	—	1	1
Vietnam	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—	—
Other	0	—	15	0	—	0	—	1,733	1,733	1	58	56
Total	164	—	40	188	—	1,667	—	23,694	70,696	1,516	764	2,281
Persian Gulf³	—	—	—	—	—	802	—	2,149	6,261	133	69	202

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 44. PAD District 4 and 5 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2019
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
	PAD District 4									
OPEC	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-
Non-OPEC	9,284	458	-	-	-	7	7	-	58	58
Canada	9,284	458	-	-	-	7	7	-	58	58
Qatar	-	-	-	-	-	-	-	-	-	-
Other	0	0	-	-	-	0	0	-	0	0
Total	9,284	458	-	-	-	7	7	-	58	58
	PAD District 5									
OPEC	24,723	-	-	379	-	-	-	-	-	-
Algeria	-	-	-	379	-	-	-	-	-	-
Angola	1,620	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	5,913	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	6,812	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-
Libya	2,067	-	-	-	-	-	-	-	-	-
Nigeria	1,468	-	-	-	-	-	-	-	-	-
Saudi Arabia	6,843	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-
Non-OPEC	19,066	1,725	-	2,157	-	964	964	-	949	949
Argentina	994	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-
Brazil	3,283	-	-	-	-	-	-	-	-	-
Brunei	971	-	-	-	-	-	-	-	-	-
Canada	8,664	1,718	-	-	-	72	72	-	-	-
China	-	-	-	-	-	-	-	-	-	-
Colombia	1,312	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-	-
Japan	-	-	-	-	-	-	-	-	-	-
Korea, South	-	-	-	-	-	639	639	-	281	281
Malaysia	-	-	-	-	-	-	-	-	-	-
Mexico	830	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	10	10
Oman	-	-	-	-	-	-	-	-	-	-
Papua New Guinea	-	-	-	-	-	-	-	-	-	-
Peru	209	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-
Singapore	-	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-	-
Taiwan	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-
Other	2,803	7	-	2,157	-	253	253	-	658	658
Total	43,789	1,815	-	2,536	-	964	964	-	949	949
Persian Gulf ³	13,655	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 44. PAD District 4 and 5 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2019
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	Total
PAD District 4											
OPEC	-	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	-	-	-	38	-	-	174	-	-	-	174
Canada	-	-	-	38	-	-	174	-	-	-	174
Qatar	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	0	-	-	0	-	-	-	0
Total	-	-	-	38	-	-	174	-	-	-	174
PAD District 5											
OPEC	-	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	-	-	522	26	696	-	467	-	1	-	468
Argentina	-	-	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-	-
Brazil	-	-	522	-	-	-	-	-	-	-	-
Brunei	-	-	-	-	-	-	-	-	-	-	-
Canada	-	-	-	5	-	-	467	-	1	-	468
China	-	-	-	-	-	-	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-	-	-
Japan	-	-	-	-	-	-	-	-	-	-	-
Korea, South	-	-	-	21	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-	-
Papua New Guinea	-	-	-	-	-	-	-	-	-	-	-
Peru	-	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-	-
Singapore	-	-	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-	-	-
Taiwan	-	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	0	0	696	-	0	-	0	-	0
Total	-	-	522	26	696	-	467	-	1	-	468
Persian Gulf³	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 44. PAD District 4 and 5 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2019
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
	PAD District 4								
OPEC	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-
Non-OPEC	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-
	PAD District 5								
OPEC	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-
Non-OPEC	-	3	-	3,438	-	-	123	66	189
Argentina	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-
Brazil	-	-	-	-	-	-	-	-	-
Brunei	-	-	-	-	-	-	-	-	-
Canada	-	3	-	-	-	-	123	66	189
China	-	-	-	310	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-
Japan	-	-	-	331	-	-	-	-	-
Korea, South	-	-	-	2,523	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-
Papua New Guinea	-	-	-	-	-	-	-	-	-
Peru	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-
Singapore	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Taiwan	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-
Other	-	0	-	274	-	-	0	0	0
Total	-	3	-	3,438	-	-	123	66	189
Persian Gulf ³	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 44. PAD District 4 and 5 - Imports of Crude Oil and Petroleum Products by Country of Origin, October 2019
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
	PAD District 4											
OPEC	—	—	—	—	—	—	—	—	—	—	—	—
Algeria	—	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—	—	—	—
Non-OPEC	—	—	—	—	50	—	1	786	10,070	299	25	325
Canada	—	—	—	—	50	—	1	786	10,070	299	25	325
Qatar	—	—	—	—	—	—	—	—	—	—	—	—
Other	—	—	—	—	0	—	0	0	0	0	0	0
Total	—	—	—	—	50	—	1	786	10,070	299	25	325
	PAD District 5											
OPEC	—	—	—	—	—	—	—	469	25,192	798	15	813
Algeria	—	—	—	—	—	—	—	379	379	—	12	12
Angola	—	—	—	—	—	—	—	—	1,620	52	—	52
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	5,913	191	—	191
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	6,812	220	—	220
Kuwait	—	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	2,067	67	—	67
Nigeria	—	—	—	—	—	—	—	—	1,468	47	—	47
Saudi Arabia	—	—	—	—	—	—	—	—	6,843	221	—	221
United Arab Emirates	—	—	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—	—	—	—
Non-OPEC	35	—	56	29	48	25	—	11,330	30,396	615	365	981
Argentina	—	—	—	—	—	—	—	—	994	32	—	32
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	—	522	3,805	106	17	123
Brunei	—	—	—	—	—	—	—	—	971	31	—	31
Canada	—	—	—	29	48	2	—	2,534	11,198	279	82	361
China	—	—	33	—	—	—	—	343	343	—	11	11
Colombia	—	—	—	—	—	—	—	—	1,312	42	—	42
Finland	—	—	—	—	—	—	—	—	—	—	—	—
Germany	—	—	1	—	—	—	—	1	1	—	0	0
Indonesia	—	—	—	—	—	—	—	—	—	—	—	—
Japan	—	—	22	—	—	—	—	353	353	—	11	11
Korea, South	—	—	—	—	—	23	—	3,487	3,487	—	112	112
Malaysia	—	—	—	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	830	27	—	27
Netherlands	—	—	—	—	—	—	—	10	10	—	0	0
Oman	—	—	—	—	—	—	—	—	—	—	—	—
Papua New Guinea	—	—	—	—	—	—	—	—	—	—	—	—
Peru	—	—	—	—	—	—	—	—	209	7	—	7
Qatar	—	—	—	—	—	—	—	—	—	—	—	—
Singapore	—	—	—	—	—	—	—	696	696	—	22	22
Sweden	—	—	—	—	—	—	—	—	—	—	—	—
Taiwan	35	—	—	—	—	—	—	35	35	—	1	1
United Kingdom	—	—	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Other	0	—	0	0	0	0	—	3,349	6,152	91	109	201
Total	35	—	56	29	48	25	—	11,799	55,588	1,413	381	1,793
Persian Gulf ³	—	—	—	—	—	—	—	—	13,655	440	—	440

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 45. PAD District 1 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2019
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	81,920	—	—	1,606	—	81	81	100	7,420	7,520
Algeria	6,413	—	—	1,201	—	—	—	—	—	—
Angola	672	—	—	—	—	—	—	—	759	759
Congo (Brazzaville)	5,537	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—
Libya	6,271	—	—	—	—	—	—	—	—	—
Nigeria	33,484	—	—	360	—	—	—	—	1,617	1,617
Saudi Arabia	29,543	—	—	—	—	81	81	100	2,474	2,574
United Arab Emirates	—	—	—	—	—	—	—	—	1,264	1,264
Venezuela	—	—	—	45	—	—	—	—	1,306	1,306
Non-OPEC	138,045	11,639	2,504	14,504	—	19,240	19,240	53,951	119,292	173,243
Argentina	—	—	—	212	—	—	—	—	52	52
Aruba	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	513	513	1,074	4,060	5,134
Brazil	546	—	—	399	—	—	—	—	13,852	13,852
Brunei	—	—	—	—	—	—	—	—	—	—
Cameroon	527	—	—	503	—	—	—	—	—	—
Canada	68,105	11,064	2,504	2,557	—	4,021	4,021	28,045	12,828	40,873
Chad	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—	—
Colombia	6,285	—	—	—	—	—	—	—	3,477	3,477
Denmark	4,411	—	—	—	—	1	1	9	349	358
Egypt	2,755	—	—	—	—	138	138	—	337	337
Estonia	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	581	581	157	6,760	6,917
France	—	—	—	128	—	4,507	4,507	1,743	562	2,305
Germany	—	—	—	222	—	71	71	3	17	20
Guatemala	—	—	—	—	—	—	—	—	—	—
India	—	—	—	164	—	—	—	—	16,275	16,275
Indonesia	—	—	—	—	—	—	—	—	566	566
Italy	—	—	—	68	—	166	166	88	3,252	3,340
Korea, South	—	—	—	—	—	—	—	—	339	339
Latvia	—	—	—	—	—	—	—	—	69	69
Lithuania	—	—	—	—	—	—	—	—	845	845
Malaysia	—	—	—	—	—	—	—	—	52	52
Mexico	698	—	—	667	—	—	—	—	75	75
Netherlands	—	—	—	292	—	2,308	2,308	8,242	14,328	22,570
Norway	15,486	192	—	167	—	396	396	622	5,624	6,246
Oman	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	837	6,107	6,944
Qatar	—	—	—	—	—	—	—	—	—	—
Russia	14,890	—	—	5,386	—	851	851	812	12,528	13,340
Spain	194	—	—	1,720	—	1,135	1,135	1	7,618	7,619
Sweden	—	191	—	122	—	313	313	35	568	603
Syria	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—
United Kingdom	10,097	—	—	—	—	4,236	4,236	12,215	3,478	15,693
Vietnam	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—
Other	14,051	192	0	1,897	—	3	3	68	5,274	5,342
Total	219,965	11,639	2,504	16,110	—	19,321	19,321	54,051	126,712	180,763
Persian Gulf³	29,543	—	—	—	—	81	81	100	3,738	3,838

See footnotes at end of table.

Table 45. PAD District 1 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2019
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	—	—	—	—	—	—	1,706	—	—	—	1,706
Algeria	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	312	—	—	—	312
Saudi Arabia	—	—	—	—	—	—	1,193	—	—	—	1,193
United Arab Emirates	—	—	—	—	—	—	200	—	—	—	200
Venezuela	—	—	—	—	—	—	1	—	—	—	1
Non-OPEC	—	—	—	1,481	—	—	42,147	651	778	481	44,057
Argentina	—	—	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	501	—	—	—	501
Bahrain	—	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	143	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	285	—	—	24,555	375	622	481	26,043
Chad	—	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	279	—	—	—	279
Colombia	—	—	—	—	—	—	7,112	—	—	—	7,112
Denmark	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—	—
France	—	—	—	121	—	—	—	—	—	—	—
Germany	—	—	—	875	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	6,477	—	—	—	6,477
Indonesia	—	—	—	—	—	—	312	—	—	—	312
Italy	—	—	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	464	—	—	—	464
Mexico	—	—	—	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	—	—	156	—	156
Norway	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	2,071	—	—	—	2,071
Russia	—	—	—	—	—	—	366	276	—	—	642
Spain	—	—	—	57	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—
Other	—	—	—	0	—	—	0	0	0	0	0
Total	—	—	—	1,481	—	—	43,853	651	778	481	45,763
Persian Gulf³	—	—	—	—	—	—	3,464	—	—	—	3,464

See footnotes at end of table.

Table 45. PAD District 1 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2019
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	—	—	—	1,724	—	—	—	1,912	1,912
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	220	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	6	—	—	—	—	—
Kuwait	—	—	—	101	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	20	—	—	—	—	—
Saudi Arabia	—	—	—	618	—	—	—	—	—
United Arab Emirates	—	—	—	658	—	—	—	20	20
Venezuela	—	—	—	101	—	—	—	1,892	1,892
Non-OPEC	388	123	—	15,046	8	996	2,882	15,835	19,713
Argentina	—	—	—	—	—	939	1,499	—	2,438
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	422	562	984
Bahrain	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	9	—	—	—	140	140
Brunei	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—
Canada	—	11	—	6,603	8	57	398	5,195	5,650
Chad	—	—	—	—	—	—	—	—	—
China	—	—	—	275	—	—	—	—	—
Colombia	101	—	—	—	—	—	40	3,447	3,487
Denmark	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—
India	—	—	—	613	—	—	—	4	4
Indonesia	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	6,445	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	20	1,041	1,061
Netherlands	—	112	—	—	—	—	—	610	610
Norway	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	484	—	—	—	—	—
Russia	—	—	—	—	—	—	99	4,221	4,320
Spain	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	286	286
Syria	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—
Other	287	0	—	617	0	0	404	329	733
Total	388	123	—	16,770	8	996	2,882	17,747	21,625
Persian Gulf³	—	—	—	1,867	—	—	—	20	20

See footnotes at end of table.

Table 45. PAD District 1 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2019
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
OPEC	—	—	—	—	31	547	—	15,127	97,047	269	50	319
Algeria	—	—	—	—	—	410	—	1,611	8,024	21	5	26
Angola	—	—	—	—	—	—	—	759	1,431	2	2	5
Congo (Brazzaville)	—	—	—	—	—	—	—	—	5,537	18	—	18
Ecuador	—	—	—	—	—	—	—	220	220	—	1	1
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	6	6	—	0	0
Kuwait	—	—	—	—	—	—	—	101	101	—	0	0
Libya	—	—	—	—	—	—	—	—	6,271	21	—	21
Nigeria	—	—	—	—	—	—	—	2,309	35,793	110	8	118
Saudi Arabia	—	—	—	—	—	—	—	4,466	34,009	97	15	112
United Arab Emirates	—	—	—	—	—	137	—	2,279	2,279	—	7	7
Venezuela	—	—	—	—	31	—	—	3,376	3,376	—	11	11
Non-OPEC	12	14	687	25	8,922	1,948	—	313,554	451,599	454	1,031	1,486
Argentina	—	—	—	—	—	14	—	2,716	2,716	—	9	9
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	1,485	1,485	—	5	5
Bahrain	—	—	—	—	—	—	—	—	—	—	—	—
Belgium	1	—	—	—	84	82	—	5,957	5,957	—	20	20
Brazil	—	—	—	—	—	—	—	14,400	14,946	2	47	49
Brunei	—	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	503	1,030	2	2	3
Canada	—	14	410	5	6,780	1,114	—	107,942	176,047	224	355	579
Chad	—	—	—	—	—	—	—	—	—	—	—	—
China	—	—	128	—	—	—	—	682	682	—	2	2
Colombia	—	—	—	—	94	—	—	14,271	20,556	21	47	68
Denmark	—	—	—	—	—	—	—	359	4,770	15	1	16
Egypt	—	—	—	—	—	—	—	475	3,230	9	2	11
Estonia	—	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	7,498	7,498	—	25	25
France	—	—	—	—	—	81	—	7,142	7,142	—	23	23
Germany	—	—	42	—	—	111	—	1,341	1,341	—	4	4
Guatemala	—	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	1	—	23,534	23,534	—	77	77
Indonesia	—	—	2	—	—	—	—	880	880	—	3	3
Italy	—	—	—	—	—	18	—	3,592	3,592	—	12	12
Korea, South	—	—	6	—	—	175	—	6,965	6,965	—	23	23
Latvia	—	—	—	—	—	—	—	69	69	—	0	0
Lithuania	—	—	—	—	—	—	—	845	845	—	3	3
Malaysia	—	—	—	—	—	4	—	520	520	—	2	2
Mexico	—	—	—	—	—	—	—	1,803	2,501	2	6	8
Netherlands	—	—	—	—	—	7	—	26,055	26,055	—	86	86
Norway	—	—	—	—	—	—	—	7,001	22,487	51	23	74
Oman	—	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	6,944	6,944	—	23	23
Qatar	—	—	—	—	—	1	—	2,556	2,556	—	8	8
Russia	—	—	—	—	—	244	—	24,783	39,673	49	82	131
Spain	—	—	7	—	1,150	—	—	11,688	11,882	1	38	39
Sweden	—	—	—	2	—	92	—	1,609	1,609	—	5	5
Syria	—	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	11	—	—	8	—	—	—	20,140	30,237	33	66	99
Vietnam	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—	—
Other	0	0	92	10	814	4	—	9,799	23,850	45	32	79
Total	12	14	687	25	8,953	2,495	—	328,681	548,646	724	1,081	1,805
Persian Gulf³	—	—	—	—	—	138	—	9,408	38,951	97	31	128

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 46. PAD District 2 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2019
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-
Equatorial Guinea	-	-	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-
Non-OPEC	774,528	23,933	2,752	315	-	1	1	-	2,570	2,570
Argentina	-	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-
Bahamas	-	-	-	-	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-	-
Brazil	475	-	-	-	-	-	-	-	-	-
Brunei	417	-	-	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-	-	-
Canada	771,781	23,933	2,752	315	-	1	1	-	2,570	2,570
Chad	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-	-
Egypt	-	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-	-
Guatemala	-	-	-	-	-	-	-	-	-	-
India	-	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-	-
Korea, South	-	-	-	-	-	-	-	-	-	-
Latvia	-	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-	-	-
Mexico	1,855	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-
Russia	-	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-	-
Syria	-	-	-	-	-	-	-	-	-	-
Trinidad and Tobago	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	-	-	-	-	-
Other	0	0	0	0	-	0	0	-	0	0
Total	774,528	23,933	2,752	315	-	1	1	-	2,570	2,570
Persian Gulf³	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 46. PAD District 2 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2019
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	-	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-	-
Equatorial Guinea	-	-	-	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	-	-	-	832	-	-	2,003	-	485	250	2,738
Argentina	-	-	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-	-
Bahamas	-	-	-	-	-	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-	-	-
Brazil	-	-	-	-	-	-	-	-	-	-	-
Brunei	-	-	-	-	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-	-	-	-
Canada	-	-	-	832	-	-	2,003	-	485	250	2,738
Chad	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-	-	-
Egypt	-	-	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-	-	-
Guatemala	-	-	-	-	-	-	-	-	-	-	-
India	-	-	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-	-	-
Korea, South	-	-	-	-	-	-	-	-	-	-	-
Latvia	-	-	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-	-
Russia	-	-	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-	-	-
Syria	-	-	-	-	-	-	-	-	-	-	-
Trinidad and Tobago	-	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	0	-	-	0	-	0	0	0
Total	-	-	-	832	-	-	2,003	-	485	250	2,738
Persian Gulf³	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 46. PAD District 2 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2019
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	—	—	—	—	—	—	—	—	—
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—
Non-OPEC	—	37	—	—	53	—	221	591	812
Argentina	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—
Canada	—	37	—	—	53	—	221	591	812
Chad	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	—	—
Denmark	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	—	—
Spain	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—
Other	—	0	—	—	0	—	0	0	0
Total	—	37	—	—	53	—	221	591	812
Persian Gulf³	—	—	—	—	—	—	—	—	—

See footnotes at end of table.

Table 46. PAD District 2 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2019
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
OPEC	—	—	—	—	—	—	—	—	—	—	—	—
Algeria	—	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—	—	—	—
Non-OPEC	798	700	62	286	2,830	1,207	—	39,926	814,454	2,548	131	2,679
Argentina	—	—	—	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	2	—	2	2	—	0	0
Brazil	—	—	—	—	—	—	—	—	475	2	—	2
Brunei	—	—	—	—	—	—	—	—	417	1	—	1
Cameroon	—	—	—	—	—	—	—	—	—	—	—	—
Canada	798	700	59	269	2,830	1,198	—	39,897	811,678	2,539	131	2,670
Chad	—	—	—	—	—	—	—	—	—	—	—	—
China	—	—	3	—	—	—	—	3	3	—	0	0
Colombia	—	—	—	—	—	—	—	—	—	—	—	—
Denmark	—	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	3	—	3	3	—	0	0
Guatemala	—	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	1,855	6	—	6
Netherlands	—	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	4	—	4	4	—	0	0
Russia	—	—	—	—	—	—	—	—	—	—	—	—
Spain	—	—	—	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	17	—	—	—	17	17	—	0	0
Syria	—	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—	—
Other	0	0	0	0	0	0	—	0	0	0	0	0
Total	798	700	62	286	2,830	1,207	—	39,926	814,454	2,548	131	2,679
Persian Gulf³	—	—	—	—	—	4	—	4	4	—	0	0

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 47. PAD District 3 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2019
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	156,175	—	—	24,640	—	—	—	—	—	—
Algeria	—	—	—	11,922	—	—	—	—	—	—
Angola	1,939	—	—	768	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	173	—	—	—	—	—	—
Ecuador	7,704	—	—	33	—	—	—	—	—	—
Equatorial Guinea	1,326	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—
Iraq	56,135	—	—	312	—	—	—	—	—	—
Kuwait	5,610	—	—	—	—	—	—	—	—	—
Libya	—	—	—	916	—	—	—	—	—	—
Nigeria	6,999	—	—	—	—	—	—	—	—	—
Saudi Arabia	47,558	—	—	5,109	—	—	—	—	—	—
United Arab Emirates	—	—	—	5,407	—	—	—	—	—	—
Venezuela	28,904	—	—	—	—	—	—	—	—	—
Non-OPEC	455,796	—	1,084	123,336	—	785	785	581	20,398	20,979
Argentina	4,305	—	—	—	—	—	—	—	628	628
Aruba	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	14,081	—	—	—	—	311	311
Brazil	21,971	—	—	783	—	—	—	—	3,017	3,017
Brunei	—	—	—	—	—	—	—	—	—	—
Cameroon	1,339	—	—	290	—	—	—	—	—	—
Canada	153,315	—	—	2,291	—	—	—	—	9	9
Chad	1,901	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	414	414
Colombia	65,971	—	—	246	—	—	—	—	200	200
Denmark	—	—	—	320	—	—	—	—	70	70
Egypt	1,625	—	—	11,414	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	235	—	227	227	—	312	312
France	—	—	65	1,154	—	—	—	—	111	111
Germany	—	—	—	1,693	—	1	1	—	375	375
Guatemala	2,204	—	—	—	—	—	—	—	—	—
India	—	—	—	1,121	—	—	—	—	4,956	4,956
Indonesia	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	1,643	—	—	—	—	1,627	1,627
Korea, South	—	—	—	—	—	—	—	—	303	303
Latvia	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	19	—	—	—	—	325	325
Malaysia	—	—	—	—	—	—	—	—	—	—
Mexico	169,632	—	193	300	—	—	—	—	1,464	1,464
Netherlands	486	—	—	3,201	—	—	—	—	1,000	1,000
Norway	629	—	—	4,585	—	—	—	—	322	322
Oman	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	916	916
Qatar	—	—	—	—	—	—	—	—	67	67
Russia	10,315	—	—	68,450	—	—	—	—	317	317
Spain	—	—	—	1,134	—	273	273	—	553	553
Sweden	—	—	—	766	—	—	—	—	325	325
Syria	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	11,202	—	—	—	—	—	—	—	350	350
United Kingdom	10,765	—	—	1,585	—	284	284	581	767	1,348
Vietnam	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—
Other	136	—	826	8,025	—	0	0	0	1,659	1,659
Total	611,971	—	1,084	147,976	—	785	785	581	20,398	20,979
Persian Gulf³	109,303	—	—	10,828	—	—	—	—	67	67

See footnotes at end of table.

Table 47. PAD District 3 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2019
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	—	—	—	—	—	—	293	—	—	156	449
Algeria	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	156	156
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	293	—	—	—	293
Non-OPEC	240	785	—	235	—	—	223	—	261	880	1,364
Argentina	214	—	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	396	396
Bahrain	—	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—	—	—
Brazil	26	785	—	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	—	—	—	223	—	—	—	223
Chad	—	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	—	—	—	—
Denmark	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—	—	—
Germany	—	—	—	122	—	—	—	—	106	—	106
Guatemala	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	125	—	125
Netherlands	—	—	—	—	—	—	—	—	30	—	30
Norway	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	—	—	484	484
Spain	—	—	—	113	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—
Other	0	0	—	0	—	—	0	—	0	0	0
Total	240	785	—	235	—	—	516	—	261	1,036	1,813
Persian Gulf³	—	—	—	—	—	—	—	—	—	—	—

See footnotes at end of table.

Table 47. PAD District 3 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2019
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	—	—	—	18	37	—	374	1,332	1,706
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	374	—	374
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	132	132
Equatorial Guinea	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	18	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	37	—	—	679	679
United Arab Emirates	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	521	521
Non-OPEC	—	82	—	12	4,924	2,480	1,311	9,430	13,221
Argentina	—	—	—	—	—	—	148	—	148
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	285	—	68	274	342
Brunei	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—
Canada	—	—	—	6	685	299	4	695	998
Chad	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	560	—	566	1,126
Denmark	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	38	38
Estonia	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—
France	—	—	—	—	37	—	—	—	—
Germany	—	—	—	—	—	—	10	—	10
Guatemala	—	—	—	—	—	—	—	—	—
India	—	—	—	—	197	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	2,557	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	6	228	749	—	4,760	5,509
Netherlands	—	59	—	—	13	—	182	252	434
Norway	—	—	—	—	—	—	—	244	244
Oman	—	—	—	—	—	—	—	256	256
Portugal	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	13	872	100	2,345	3,317
Spain	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—
Other	—	23	—	0	909	0	799	0	799
Total	—	82	—	30	4,961	2,480	1,685	10,762	14,927
Persian Gulf³	—	—	—	18	37	—	—	679	679

See footnotes at end of table.

Table 47. PAD District 3 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2019
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
OPEC	—	—	—	—	—	843	—	27,693	183,868	514	91	605
Algeria	—	—	—	—	—	—	—	11,922	11,922	—	39	39
Angola	—	—	—	—	—	—	—	1,142	3,081	6	4	10
Congo (Brazzaville)	—	—	—	—	—	—	—	173	173	—	1	1
Ecuador	—	—	—	—	—	—	—	321	8,025	25	1	26
Equatorial Guinea	—	—	—	—	—	—	—	—	1,326	4	—	4
Gabon	—	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	330	56,465	185	1	186
Kuwait	—	—	—	—	—	—	—	—	5,610	18	—	18
Libya	—	—	—	—	—	—	—	916	916	—	3	3
Nigeria	—	—	—	—	—	—	—	—	6,999	23	—	23
Saudi Arabia	—	—	—	—	—	—	—	5,825	53,383	156	19	176
United Arab Emirates	—	—	—	—	—	843	—	6,250	6,250	—	21	21
Venezuela	—	—	—	—	—	—	—	814	29,718	95	3	98
Non-OPEC	3,006	160	269	1,394	55	9,271	—	181,241	637,037	1,499	596	2,096
Argentina	—	—	—	768	—	11	—	1,769	6,074	14	6	20
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	396	396	—	1	1
Bahrain	—	—	—	—	—	710	—	710	710	—	2	2
Belgium	—	—	—	—	—	47	—	14,439	14,439	—	47	47
Brazil	—	9	—	188	—	—	—	5,435	27,406	72	18	90
Brunei	—	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	290	1,629	4	1	5
Canada	—	—	—	—	—	—	—	4,212	157,527	504	14	518
Chad	—	—	—	—	—	—	—	—	1,901	6	—	6
China	—	—	48	—	—	—	—	462	462	—	2	2
Colombia	—	—	—	—	—	—	—	1,572	67,543	217	5	222
Denmark	—	—	—	—	—	—	—	390	390	—	1	1
Egypt	—	—	—	—	—	—	—	11,452	13,077	5	38	43
Estonia	—	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	15	—	789	789	—	3	3
France	—	148	—	—	—	59	—	1,574	1,574	—	5	5
Germany	—	—	1	—	—	69	—	2,377	2,377	—	8	8
Guatemala	—	—	—	—	—	—	—	—	2,204	7	—	7
India	—	—	—	—	—	—	—	6,274	6,274	—	21	21
Indonesia	—	—	—	—	—	799	—	799	799	—	3	3
Italy	34	—	—	—	—	149	—	3,455	3,455	—	11	11
Korea, South	14	—	—	—	—	3,659	—	6,533	6,533	—	21	21
Latvia	—	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	344	344	—	1	1
Malaysia	—	—	88	—	—	—	—	88	88	—	0	0
Mexico	1,960	—	—	—	—	—	—	9,785	179,417	558	32	590
Netherlands	—	—	—	—	—	26	—	4,787	5,273	2	16	17
Norway	—	—	—	—	—	—	—	5,151	5,780	2	17	19
Oman	—	—	—	411	—	—	—	667	667	—	2	2
Portugal	—	—	—	—	—	10	—	926	926	—	3	3
Qatar	—	—	—	—	—	3,502	—	3,569	3,569	—	12	12
Russia	—	—	—	—	—	—	—	72,581	82,896	34	239	273
Spain	—	—	1	—	—	—	—	2,074	2,074	—	7	7
Sweden	—	—	—	—	—	1	—	1,092	1,092	—	4	4
Syria	—	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	350	11,552	37	1	38
United Kingdom	233	—	23	16	—	156	—	3,645	14,410	35	12	47
Vietnam	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—	—
Other	765	3	108	11	55	58	—	13,254	13,390	2	43	47
Total	3,006	160	269	1,394	55	10,114	—	208,934	820,905	2,013	687	2,700
Persian Gulf³	—	—	—	—	—	5,055	—	16,684	125,987	360	55	414

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 48. PAD District 4 and 5 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2019
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reform-ulated	Conven- tional	Total	Reform-ulated	Conven- tional	Total
	PAD District 4									
OPEC	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-
Non-OPEC	94,171	3,641	-	-	-	72	72	-	1,259	1,259
Canada	94,171	3,641	-	-	-	72	72	-	1,259	1,259
Qatar	-	-	-	-	-	-	-	-	-	-
Other	0	0	-	-	-	0	0	-	0	0
Total	94,171	3,641	-	-	-	72	72	-	1,259	1,259
	PAD District 5									
OPEC	224,757	-	-	8,516	-	-	-	-	-	-
Algeria	-	-	-	7,034	-	-	-	-	-	-
Angola	8,349	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	49,695	-	-	1,187	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	45,821	-	-	-	-	-	-	-	-	-
Kuwait	8,301	-	-	-	-	-	-	-	-	-
Libya	11,974	-	-	207	-	-	-	-	-	-
Nigeria	16,391	-	-	-	-	-	-	-	-	-
Saudi Arabia	80,743	-	-	-	-	-	-	-	-	-
United Arab Emirates	1,026	-	-	88	-	-	-	-	-	-
Venezuela	497	-	-	-	-	-	-	-	-	-
Non-OPEC	168,537	16,088	-	18,273	-	4,915	4,915	2,255	10,608	12,863
Argentina	6,774	254	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	398	-	-	-	-	-	-
Brazil	15,771	-	-	84	-	-	-	-	-	-
Brunei	7,460	-	-	-	-	-	-	-	-	-
Canada	74,278	15,489	-	1,332	-	854	854	-	717	717
China	-	-	-	-	-	-	-	-	72	72
Colombia	27,721	-	-	430	-	-	-	-	600	600
Finland	-	-	-	-	-	-	-	-	164	164
Germany	-	-	-	-	-	-	-	-	328	328
Indonesia	-	-	-	-	-	-	-	-	-	-
Japan	-	-	-	885	-	610	610	-	1,898	1,898
Korea, South	-	-	-	149	-	2,892	2,892	-	1,500	1,500
Malaysia	-	-	-	289	-	-	-	-	191	191
Mexico	11,148	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	148	148	1,942	141	2,083
Oman	-	-	-	-	-	-	-	-	-	-
Papua New Guinea	-	-	-	-	-	-	-	-	-	-
Peru	209	-	-	476	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-
Singapore	-	-	-	641	-	-	-	-	431	431
Sweden	-	-	-	737	-	-	-	-	-	-
Taiwan	-	-	-	-	-	-	-	-	327	327
United Kingdom	-	-	-	349	-	71	71	-	1,358	1,358
Vietnam	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-
Other	25,176	345	-	12,503	-	340	340	313	2,881	3,194
Total	393,294	16,252	-	26,789	-	4,915	4,915	2,255	10,608	12,863
Persian Gulf ³	135,891	-	-	88	-	-	-	-	-	-

See footnotes at end of table.

Table 48. PAD District 4 and 5 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2019
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	Total
	PAD District 4										
OPEC	-	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	-	-	-	179	-	-	1,188	-	-	-	1,188
Canada	-	-	-	179	-	-	1,188	-	-	-	1,188
Qatar	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	0	-	-	0	-	-	-	0
Total	-	-	-	179	-	-	1,188	-	-	-	1,188
	PAD District 5										
OPEC	-	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	-	-	3,986	425	4,959	-	4,146	-	10	-	4,156
Argentina	-	-	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-	-
Brazil	-	-	3,986	-	-	-	-	-	-	-	-
Brunei	-	-	-	-	-	-	-	-	-	-	-
Canada	-	-	-	82	-	-	3,628	-	10	-	3,638
China	-	-	-	-	-	-	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-	-	-
Japan	-	-	-	-	-	-	-	-	-	-	-
Korea, South	-	-	-	314	-	-	518	-	-	-	518
Malaysia	-	-	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-	-
Papua New Guinea	-	-	-	-	-	-	-	-	-	-	-
Peru	-	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-	-
Singapore	-	-	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-	-	-
Taiwan	-	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	0	29	4,959	-	0	-	0	-	0
Total	-	-	3,986	425	4,959	-	4,146	-	10	-	4,156
Persian Gulf ³	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 48. PAD District 4 and 5 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2019
(Thousand Barrels) — Continued

Country of Origin			Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
	Kerosene	Finished Aviation Gasoline							
	PAD District 4								
OPEC	—	—	—	—	—	—	—	—	—
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—
Non-OPEC	—	17	—	—	—	—	—	97	97
Canada	—	17	—	—	—	—	—	97	97
Qatar	—	—	—	—	—	—	—	—	—
Other	—	0	—	—	—	—	—	0	0
Total	—	17	—	—	—	—	—	97	97
	PAD District 5								
OPEC	—	—	—	—	—	—	—	150	150
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	150	150
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—
Non-OPEC	—	33	—	33,875	—	338	1,929	2,879	5,146
Argentina	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—
Canada	—	23	—	36	—	—	1,929	515	2,444
China	—	—	—	1,319	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—
Japan	—	—	—	5,363	—	—	—	—	—
Korea, South	—	10	—	21,719	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	1,435	1,435
Netherlands	—	—	—	—	—	—	—	80	80
Oman	—	—	—	—	—	—	—	—	—
Papua New Guinea	—	—	—	—	—	—	—	—	—
Peru	—	—	—	—	—	—	—	656	656
Qatar	—	—	—	—	—	—	—	—	—
Singapore	—	—	—	1,176	—	338	—	—	338
Sweden	—	—	—	—	—	—	—	—	—
Taiwan	—	—	—	190	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Other	—	0	—	4,072	—	0	0	193	193
Total	—	33	—	33,875	—	338	1,929	3,029	5,296
Persian Gulf ³	—	—	—	—	—	—	—	—	—

See footnotes at end of table.

Table 48. PAD District 4 and 5 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-October 2019
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks								Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
	PAD District 4											
OPEC	-	-	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	-	-	-	-	309	1	10	6,773	100,944	310	22	332
Canada	-	-	-	-	309	1	10	6,773	100,944	310	22	332
Qatar	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	0	0	0	0	0	0	0	0
Total	-	-	-	-	309	1	10	6,773	100,944	310	22	332
	PAD District 5											
OPEC	-	-	-	-	-	-	-	8,830	233,587	739	29	768
Algeria	-	-	-	-	-	-	-	7,034	7,034	-	23	23
Angola	-	-	-	-	-	-	-	-	8,349	27	-	27
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	1,337	51,032	163	4	168
Iran	-	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	45,821	151	-	151
Kuwait	-	-	-	-	-	-	-	-	8,301	27	-	27
Libya	-	-	-	-	-	-	-	207	12,181	39	1	40
Nigeria	-	-	-	-	-	-	-	-	16,391	54	-	54
Saudi Arabia	-	-	-	-	-	-	-	-	80,743	266	-	266
United Arab Emirates	-	-	-	-	-	-	-	88	1,114	3	0	4
Venezuela	-	-	-	-	-	-	-	-	497	2	-	2
Non-OPEC	304	-	536	256	970	583	-	107,368	275,905	554	353	908
Argentina	-	-	-	-	-	-	-	254	7,028	22	1	23
Aruba	-	-	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	398	398	-	1	1
Brazil	-	-	-	-	-	-	-	4,070	19,841	52	13	65
Brunei	-	-	-	-	-	-	-	-	7,460	25	-	25
Canada	-	-	-	256	775	67	-	25,713	99,991	244	85	329
China	-	-	439	-	-	-	-	1,830	1,830	-	6	6
Colombia	-	-	-	-	-	-	-	1,030	28,751	91	3	95
Finland	-	-	-	-	-	-	-	164	164	-	1	1
Germany	-	-	2	-	-	-	-	330	330	-	1	1
Indonesia	-	-	-	-	-	-	-	-	-	-	-	-
Japan	-	-	69	-	-	-	-	8,825	8,825	-	29	29
Korea, South	-	-	-	-	130	114	-	27,346	27,346	-	90	90
Malaysia	-	-	2	-	65	-	-	547	547	-	2	2
Mexico	-	-	-	-	-	-	-	1,435	12,583	37	5	41
Netherlands	-	-	-	-	-	-	-	2,311	2,311	-	8	8
Oman	-	-	-	-	-	-	-	-	-	-	-	-
Papua New Guinea	-	-	-	-	-	-	-	-	-	-	-	-
Peru	-	-	-	-	-	-	-	1,132	1,341	1	4	4
Qatar	-	-	-	-	-	-	-	-	-	-	-	-
Singapore	-	-	-	-	-	-	-	7,545	7,545	-	25	25
Sweden	-	-	-	-	-	-	-	737	737	-	2	2
Taiwan	304	-	24	-	-	-	-	845	845	-	3	3
United Kingdom	-	-	-	-	-	-	-	1,778	1,778	-	6	6
Vietnam	-	-	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-	-	-
Other	0	-	0	0	0	402	-	21,078	46,254	82	68	152
Total	304	-	536	256	970	583	-	116,198	509,492	1,294	382	1,676
Persian Gulf ³	-	-	-	-	-	-	-	88	135,979	447	0	447

- = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 49. Exports of Crude Oil and Petroleum Products by PAD District, October 2019
(Thousand Barrels)

Commodity	PAD Districts					U.S. Total	
	1	2	3	4	5	Total	Daily Average
Crude Oil¹	1	5,201	99,579	0	84	104,866	3,383
Hydrocarbon Gas Liquids	6,315	9,789	46,193	87	1,308	63,691	2,055
Natural Gas Liquids	6,315	9,789	46,193	87	1,308	63,691	2,055
Ethane	1,463	3,023	5,236	—	0	9,721	314
Propane	3,765	221	31,596	1	819	36,401	1,174
Normal Butane	962	45	9,107	—	483	10,597	342
Isobutane	1	1	187	0	—	188	6
Natural Gasoline	125	6,499	68	86	6	6,784	219
Refinery Olefins	—	—	—	—	—	—	—
Ethylene	—	—	—	—	—	—	—
Propylene	—	—	—	—	—	—	—
Normal Butylene	—	—	—	—	—	—	—
Isobutylene	—	—	—	—	—	—	—
Other Liquids	295	2,247	10,566	—	533	13,641	440
Hydrogen/Oxygenates/Renewables/	—	—	—	—	—	—	—
Other Hydrocarbons	167	684	3,472	—	197	4,520	146
Hydrogen	—	—	—	—	—	—	—
Oxygenates (excluding Fuel Ethanol)	1	2	1,670	—	0	1,673	54
Methyl Tertiary Butyl Ether (MTBE)	0	—	701	—	—	701	23
Other Oxygenates	0	2	969	—	0	972	31
Renewable Fuels (including Fuel Ethanol) ...	167	682	1,802	—	197	2,847	92
Fuel Ethanol	91	639	1,788	—	171	2,689	87
Biodiesel	76	43	14	—	26	158	5
Other Renewable Diesel	—	—	—	—	—	—	—
Other Renewable Fuels	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	—	—	—	—
Unfinished Oils	27	1,495	4,734	—	261	6,516	210
Naphthas and Lighter	12	1,490	4,504	—	245	6,251	202
Kerosene and Light Gas Oils	15	5	230	—	16	265	9
Heavy Gas Oils	—	—	—	—	—	—	—
Residuum	—	—	—	—	—	—	—
Motor Gasoline Blend.Comp. (MGBC)	101	68	2,360	—	76	2,605	84
Reformulated	1	—	22	—	0	24	1
Conventional	100	68	2,338	—	75	2,581	83
Aviation Gasoline Blend. Comp.	—	—	—	—	—	—	—
Finished Petroleum Products	3,822	1,492	79,035	40	11,446	95,836	3,091
Finished Motor Gasoline	978	222	23,893	—	1,035	26,128	843
Reformulated	—	—	—	—	—	—	—
Conventional	978	222	23,893	—	1,035	26,128	843
Finished Aviation Gasoline	—	—	—	—	—	—	—
Kerosene-Type Jet Fuel	869	61	5,133	—	820	6,882	222
Kerosene	191	1	8	—	16	216	7
Distillate Fuel Oil	297	368	31,639	26	4,629	36,959	1,192
15 ppm sulfur and under	19	1	25,793	—	2,198	28,010	904
Greater than 15 ppm to 500 ppm sulfur	262	162	3,063	26	480	3,993	129
Greater than 500 ppm sulfur	16	205	2,783	—	1,951	4,955	160
Residual Fuel Oil	47	128	3,351	5	1,005	4,536	146
Naphtha for Petro. Feed. Use	—	—	—	—	—	—	—
Other Oils for Petro. Feed. Use	—	—	—	—	—	—	—
Special Naphthas	—	—	—	—	—	—	—
Lubricants	177	183	1,995	6	330	2,691	87
Waxes	78	37	20	0	7	141	5
Petroleum Coke	1,118	333	12,416	0	3,564	17,430	562
Asphalt and Road Oil	52	159	507	3	41	763	25
Miscellaneous Products	15	1	73	0	0	90	3
Total	10,433	18,729	235,373	127	13,371	278,034	8,969

— = No Data Reported.

¹ On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require authorization.

Note: Totals may not equal sum of components due to independent rounding.

Sources: U.S. Census Bureau and EIA estimates.

Table 50. Year-to-Date Exports of Crude Oil and Petroleum Products by PAD District, January-October 2019
(Thousand Barrels)

Commodity	PAD Districts					U.S. Total	
	1	2	3	4	5	Total	Daily Average
Crude Oil¹	3,560	49,249	823,119	0	6,462	882,390	2,903
Hydrocarbon Gas Liquids	61,929	75,357	388,507	1,922	14,713	542,429	1,784
Natural Gas Liquids	61,929	75,357	388,507	1,922	14,713	542,429	1,784
Ethane	10,890	27,677	45,475	0	3	84,045	276
Propane	37,330	1,103	276,117	4	9,033	322,647	1,061
Normal Butane	12,359	1,497	66,050	49	5,532	85,206	280
Isobutane	10	8	1,594	0	6	1,612	5
Natural Gasoline	1,381	45,082	399	1,869	187	48,918	161
Refinery Olefins	—	—	—	—	—	—	—
Ethylene	—	—	—	—	—	—	—
Propylene	—	—	—	—	—	—	—
Normal Butylene	—	—	—	—	—	—	—
Isobutylene	—	—	—	—	—	—	—
Other Liquids	1,881	25,145	115,985	25	5,644	148,680	489
Hydrogen/Oxygenates/Renewables/							
Other Hydrocarbons	1,354	7,237	40,659	5	2,734	51,990	171
Hydrogen	—	—	—	—	—	—	—
Oxygenates (excluding Fuel Ethanol)	7	17	20,266	0	5	20,295	67
Methyl Tertiary Butyl Ether (MTBE)	0	0	11,527	—	0	11,527	38
Other Oxygenates	7	17	8,739	0	5	8,768	29
Renewable Fuels (including Fuel Ethanol) ...	1,347	7,220	20,393	5	2,729	31,695	104
Fuel Ethanol	1,179	5,845	20,104	0	1,996	29,123	96
Biodiesel	168	1,376	289	5	733	2,572	8
Other Renewable Diesel	—	—	—	—	—	—	—
Other Renewable Fuels	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	—	—	—	—
Unfinished Oils	267	16,449	50,700	19	1,782	69,217	228
Naphthas and Lighter	128	16,382	49,172	1	1,704	67,388	222
Kerosene and Light Gas Oils	139	67	1,528	17	77	1,829	6
Heavy Gas Oils	—	—	—	—	—	—	—
Residuum	—	—	—	—	—	—	—
Motor Gasoline Blend.Comp. (MGBC)	259	1,459	24,625	1	1,128	27,473	90
Reformulated	14	—	158	—	15	187	1
Conventional	246	1,459	24,467	1	1,113	27,286	90
Aviation Gasoline Blend. Comp.	—	—	—	—	—	—	—
Finished Petroleum Products	42,116	12,735	827,034	240	106,779	988,904	3,253
Finished Motor Gasoline	5,008	1,679	218,411	9	11,280	236,387	778
Reformulated	—	—	—	—	—	—	—
Conventional	5,008	1,679	218,411	9	11,280	236,387	778
Finished Aviation Gasoline	—	—	—	—	—	—	—
Kerosene-Type Jet Fuel	5,775	511	52,354	—	7,390	66,030	217
Kerosene	472	6	489	—	26	992	3
Distillate Fuel Oil	11,968	2,562	351,658	53	40,339	406,580	1,337
15 ppm sulfur and under	7,734	93	290,371	15	26,200	324,414	1,067
Greater than 15 ppm to 500 ppm sulfur	2,984	1,034	27,891	38	5,054	37,000	122
Greater than 500 ppm sulfur	1,250	1,435	33,396	—	9,085	45,165	149
Residual Fuel Oil	9,476	1,461	51,180	77	9,194	71,388	235
Naphtha for Petro. Feed. Use	—	—	—	—	—	—	—
Other Oils for Petro. Feed. Use	—	—	—	—	—	—	—
Special Naphthas	—	—	—	—	—	—	—
Lubricants	2,186	1,897	25,151	69	3,034	32,337	106
Waxes	581	338	248	2	54	1,223	4
Petroleum Coke	5,663	2,951	122,012	1	34,902	165,530	545
Asphalt and Road Oil	849	1,306	5,175	25	559	7,913	26
Miscellaneous Products	138	24	356	4	3	525	2
Total	109,486	162,487	2,154,645	2,187	133,598	2,562,402	8,429

— = No Data Reported.

¹ On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require authorization.

Note: Totals may not equal sum of components due to independent rounding.

Sources: U.S. Census Bureau and EIA estimates.

Table 51. Exports of Crude Oil and Petroleum Products by Destination, October 2019
(Thousand Barrels)

Destination	Crude Oil ¹	Natural Gas Liquids	Refinery Olefins	Unfinished Oils	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
Argentina	—	—	—	160	—	170	170	—	—	—
Australia	5,961	587	—	0	—	0	0	—	—	—
Bahamas	—	23	—	—	—	114	114	—	0	0
Bahrain	—	—	—	—	—	1	1	—	—	—
Belgium	614	3	—	3	—	—	—	—	0	0
Belize	—	—	—	—	—	167	167	—	168	168
Brazil	848	651	—	1,069	—	1,781	1,781	—	103	103
Canada	15,175	10,478	—	1,559	—	1,363	1,363	—	1,186	1,186
Cayman Islands	—	0	—	—	—	11	11	—	—	—
Chile	597	245	—	6	—	114	114	—	—	—
China	—	267	—	1	—	3	3	—	—	—
Colombia	—	7	—	639	—	325	325	—	329	329
Costa Rica	—	248	—	3	—	773	773	—	—	—
Denmark	2,163	—	—	121	—	—	—	—	—	—
Dominican Republic	502	813	—	0	—	210	210	—	0	0
Ecuador	—	1,367	—	8	—	1,079	1,079	—	257	257
Egypt	—	1,181	—	—	—	—	—	—	—	—
El Salvador	—	474	—	1	—	573	573	—	—	—
Finland	—	—	—	0	—	—	—	—	—	—
France	6,634	722	—	16	—	—	—	—	—	—
Germany	734	—	—	4	—	—	—	—	—	—
Ghana	—	220	—	—	—	—	—	—	—	—
Gibraltar	—	539	—	—	—	—	—	—	—	—
Greece	769	—	—	—	—	—	—	—	—	—
Guatemala	—	417	—	2	—	1,518	1,518	—	81	81
Honduras	—	382	—	2	—	386	386	0	0	0
Hong Kong	—	—	—	0	—	—	—	—	—	—
India	7,419	6,510	—	8	—	—	—	—	—	—
Indonesia	—	3,521	—	0	—	—	—	—	—	—
Ireland	1,196	—	—	—	—	—	—	—	—	—
Israel	755	—	—	—	—	—	—	—	—	—
Italy	3,975	50	—	0	—	0	0	—	—	—
Jamaica	320	0	—	—	—	114	114	—	0	0
Japan	2,318	11,992	—	1,647	—	0	0	—	—	—
Korea, South	12,257	5,979	—	1,011	—	1	1	0	0	0
Lebanon	—	—	—	—	—	—	—	—	—	—
Mexico	—	5,498	—	88	—	14,997	14,997	22	455	477
Montenegro	—	—	—	—	—	—	—	—	—	—
Morocco	—	56	—	—	—	—	—	—	—	—
Mozambique	—	—	—	—	—	—	—	—	—	—
Netherlands	13,036	2,077	—	15	—	52	52	—	0	0
New Zealand	—	1	—	0	—	—	—	—	—	—
Nicaragua	400	—	—	—	—	288	288	—	—	—
Nigeria	—	240	—	122	—	0	0	—	—	—
Norway	—	872	—	0	—	—	—	—	—	—
Pakistan	—	—	—	—	—	—	—	—	—	—
Panama	1,828	0	—	0	—	1,130	1,130	—	—	—
Peru	2,665	482	—	4	—	301	301	—	—	—
Philippines	—	—	—	0	—	0	0	—	—	—
Portugal	—	413	—	—	—	—	—	—	—	—
Puerto Rico	—	1	—	1	—	3	3	—	—	—
Romania	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	0	0	—	—	—
Serbia (Excludes Kosovo) ..	—	—	—	—	—	—	—	—	—	—
Singapore	2,009	1,125	—	17	—	0	0	0	—	0
South Africa	322	467	—	0	—	—	—	—	—	—
Spain	2,112	575	—	—	—	—	—	—	—	—
Switzerland	—	—	—	0	—	—	—	—	—	—
Taiwan	4,172	1,736	—	0	—	1	1	—	—	—
Thailand	5,565	0	—	1	—	—	—	—	—	—
Trinidad and Tobago	—	0	—	0	—	303	303	—	—	—
Turkey	—	830	—	—	—	2	2	—	—	—
United Arab Emirates	809	—	—	1	—	—	—	—	—	—
United Kingdom	7,718	946	—	1	—	—	—	—	—	—
Venezuela	—	0	—	1	—	3	3	0	—	0
Other	1,993	1,696	—	5	—	345	345	2	2	4
Total	104,866	63,691	—	6,516	—	26,128	26,128	24	2,581	2,605

See footnotes at end of table.

Table 51. Exports of Crude Oil and Petroleum Products by Destination, October 2019
(Thousand Barrels) — Continued

Destination	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
Argentina	—	—	—	—	—	—	308	—	—	—	308
Australia	—	0	0	—	—	—	—	—	0	—	0
Bahamas	—	—	—	—	—	—	960	—	268	—	1,228
Bahrain	—	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	0	—	—	—	—	—	—	—	—
Belize	—	—	—	—	—	—	—	52	—	—	52
Brazil	—	0	279	—	—	—	5,328	639	131	—	6,099
Canada	—	1	716	143	—	—	0	627	211	—	838
Cayman Islands	—	—	—	—	—	—	15	—	—	—	15
Chile	209	—	1	—	—	—	3,311	—	—	—	3,311
China	—	0	0	—	—	—	2	—	—	—	2
Colombia	—	—	202	—	—	—	1,448	—	—	—	1,448
Costa Rica	—	0	0	—	—	—	930	—	—	—	930
Denmark	—	—	—	—	—	—	—	—	—	—	—
Dominican Republic	—	—	4	—	—	—	237	—	997	—	1,234
Ecuador	—	—	—	—	—	—	—	257	299	—	556
Egypt	—	—	—	—	—	—	192	—	—	—	192
El Salvador	—	—	—	—	—	—	4	309	—	—	312
Finland	—	—	52	—	—	—	—	—	—	—	—
France	—	0	0	—	—	—	—	—	—	—	—
Germany	—	0	0	0	—	—	0	—	—	—	0
Ghana	—	—	—	—	—	—	—	—	—	—	—
Gibraltar	—	—	—	—	—	—	—	—	418	—	418
Greece	—	—	0	—	—	—	—	—	—	—	—
Guatemala	—	0	0	—	—	—	431	679	75	—	1,184
Honduras	—	—	260	—	—	—	88	277	—	—	365
Hong Kong	—	—	0	—	—	—	—	—	—	—	—
India	—	0	422	—	—	—	1	—	—	—	1
Indonesia	—	—	0	—	—	—	—	—	—	—	—
Ireland	—	—	—	—	—	—	—	—	—	—	—
Israel	—	0	0	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	96	—	—	—	96
Jamaica	—	—	48	—	—	—	28	—	124	—	152
Japan	—	965	32	—	—	—	0	—	—	—	0
Korea, South	—	0	221	—	—	—	1	—	—	—	1
Lebanon	—	—	—	—	—	—	228	—	—	—	228
Mexico	492	1	53	0	—	—	9,071	1	53	—	9,125
Montenegro	—	—	—	—	—	—	—	—	—	—	—
Morocco	—	—	—	—	—	—	101	—	—	—	101
Mozambique	—	—	—	—	—	—	—	—	—	—	—
Netherlands	—	4	59	—	—	—	142	284	294	—	720
New Zealand	—	—	—	—	—	—	0	—	—	—	0
Nicaragua	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	68	—	—	—	—	—	—	—	—
Norway	—	—	13	—	—	—	—	—	—	—	—
Pakistan	—	—	0	—	—	—	—	—	—	—	—
Panama	—	0	—	—	—	—	1,432	215	1,724	—	3,372
Peru	—	0	52	14	—	—	1,877	—	—	—	1,877
Philippines	—	0	101	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—	—
Puerto Rico	0	0	1	—	—	—	1	—	—	—	1
Romania	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	14	—	—	—	2	—	—	—	2
Serbia (Excludes Kosovo) ..	—	—	—	—	—	—	—	—	—	—	—
Singapore	—	0	0	0	—	—	663	—	100	—	763
South Africa	—	—	—	—	—	—	—	—	—	—	—
Spain	—	—	0	—	—	—	0	—	16	—	16
Switzerland	—	0	1	—	—	—	—	—	—	—	—
Taiwan	—	0	0	—	—	—	—	—	—	—	—
Thailand	—	0	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	0	—	—	—	80	270	0	—	350
Turkey	—	—	—	—	—	—	1	—	—	—	1
United Arab Emirates	—	—	—	—	—	—	1	1	—	—	2
United Kingdom	—	—	86	—	—	—	83	—	—	—	83
Venezuela	—	—	—	—	—	—	—	—	—	—	—
Other	—	1	4	1	—	—	948	382	245	—	1,576
Total	701	972	2,689	158	—	—	28,010	3,993	4,955	—	36,959

See footnotes at end of table.

Table 51. Exports of Crude Oil and Petroleum Products by Destination, October 2019
(Thousand Barrels) — Continued

Destination	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil	Petrochemical Feedstocks	
							Naphtha	Other Oils
Argentina	—	—	—	130	—	—	—	—
Australia	—	—	—	—	—	—	—	—
Bahamas	0	—	—	100	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—
Belize	—	—	—	9	—	—	—	—
Brazil	—	—	—	651	—	32	—	—
Canada	191	—	—	1,815	—	1,057	—	—
Cayman Islands	0	—	—	9	—	2	—	—
Chile	1	—	—	328	—	—	—	—
China	0	—	—	—	—	1	—	—
Colombia	—	—	—	—	—	—	—	—
Costa Rica	5	—	—	120	—	—	—	—
Denmark	—	—	—	—	—	—	—	—
Dominican Republic	0	—	—	139	—	—	—	—
Ecuador	1	—	—	—	—	214	—	—
Egypt	0	—	—	—	—	—	—	—
El Salvador	0	—	—	15	—	—	—	—
Finland	—	—	—	—	—	0	—	—
France	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—
Ghana	—	—	—	—	—	—	—	—
Gibraltar	—	—	—	—	—	150	—	—
Greece	—	—	—	—	—	—	—	—
Guatemala	0	—	—	147	—	28	—	—
Honduras	0	—	—	22	—	255	—	—
Hong Kong	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—
Ireland	—	—	—	—	—	—	—	—
Israel	—	—	—	333	—	—	—	—
Italy	—	—	—	0	—	—	—	—
Jamaica	0	—	—	0	—	381	—	—
Japan	1	—	—	—	—	—	—	—
Korea, South	—	—	—	—	—	—	—	—
Lebanon	—	—	—	—	—	160	—	—
Mexico	15	—	—	1,592	—	1,153	—	—
Montenegro	—	—	—	—	—	—	—	—
Morocco	—	—	—	—	—	—	—	—
Mozambique	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	583	—	—
New Zealand	—	—	—	—	—	—	—	—
Nicaragua	0	—	—	0	—	—	—	—
Nigeria	0	—	—	—	—	—	—	—
Norway	—	—	—	293	—	—	—	—
Pakistan	—	—	—	—	—	—	—	—
Panama	0	—	—	542	—	95	—	—
Peru	—	—	—	220	—	—	—	—
Philippines	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—
Puerto Rico	—	—	—	0	—	—	—	—
Romania	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—
Serbia (Excludes Kosovo) ..	—	—	—	—	—	—	—	—
Singapore	0	—	—	—	—	302	—	—
South Africa	—	—	—	—	—	0	—	—
Spain	—	—	—	—	—	—	—	—
Switzerland	—	—	—	—	—	—	—	—
Taiwan	—	—	—	—	—	0	—	—
Thailand	—	—	—	—	—	0	—	—
Trinidad and Tobago	0	—	—	240	—	—	—	—
Turkey	—	—	—	3	—	—	—	—
United Arab Emirates	0	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—
Venezuela	—	—	—	0	—	—	—	—
Other	2	—	—	174	—	123	—	—
Total	216	—	—	6,882	—	4,536	—	—

See footnotes at end of table.

Table 51. Exports of Crude Oil and Petroleum Products by Destination, October 2019
(Thousand Barrels) — Continued

Destination	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Argentina	0	—	0	22	—	791	791	—	26	26
Australia	1	442	0	33	0	1,063	7,024	192	34	227
Bahamas	—	—	6	3	—	1,474	1,474	—	48	48
Bahrain	—	—	—	0	—	1	1	—	0	0
Belgium	0	232	—	358	1	597	1,212	20	19	39
Belize	—	—	—	1	—	396	396	—	13	13
Brazil	2	1,107	—	329	1	12,103	12,951	27	390	418
Canada	108	965	214	252	5	20,889	36,064	490	674	1,163
Cayman Islands	—	—	1	0	—	38	38	—	1	1
Chile	0	1	87	54	—	4,357	4,954	19	141	160
China	2	827	1	12	1	1,119	1,119	—	36	36
Colombia	1	—	0	104	0	3,057	3,057	—	99	99
Costa Rica	0	—	3	15	—	2,099	2,099	—	68	68
Denmark	0	165	—	0	—	286	2,449	70	9	79
Dominican Republic	0	170	71	11	0	2,653	3,155	16	86	102
Ecuador	0	182	0	29	—	3,694	3,694	—	119	119
Egypt	—	0	—	1	—	1,374	1,374	—	44	44
El Salvador	—	—	—	23	—	1,399	1,399	—	45	45
Finland	—	—	—	0	—	53	53	—	2	2
France	0	572	—	0	—	1,311	7,945	214	42	256
Germany	1	0	1	2	0	8	743	24	0	24
Ghana	—	—	—	0	—	220	220	—	7	7
Gibraltar	—	—	—	—	—	1,108	1,108	—	36	36
Greece	—	720	—	0	—	721	1,490	25	23	48
Guatemala	—	272	—	19	—	3,669	3,669	—	118	118
Honduras	—	545	42	12	—	2,271	2,271	—	73	73
Hong Kong	0	—	—	1	0	1	1	—	0	0
India	2	3,005	1	33	0	9,982	17,401	239	322	561
Indonesia	0	0	1	0	0	3,523	3,523	—	114	114
Ireland	0	303	—	0	0	303	1,499	39	10	48
Israel	0	—	—	2	0	335	1,090	24	11	35
Italy	0	972	—	1	—	1,119	5,094	128	36	164
Jamaica	—	—	—	5	0	701	1,021	10	23	33
Japan	1	1,652	1	7	3	16,301	18,619	75	526	601
Korea, South	0	1	1	8	0	7,223	19,480	395	233	628
Lebanon	—	118	—	1	—	506	506	—	16	16
Mexico	19	2,102	285	1,003	73	36,974	36,974	—	1,193	1,193
Montenegro	—	—	—	—	—	—	—	—	—	—
Morocco	—	433	—	—	—	591	591	—	19	19
Mozambique	—	41	—	—	—	41	41	—	1	1
Netherlands	1	544	1	52	1	4,110	17,146	421	133	553
New Zealand	0	50	—	1	—	51	51	—	2	2
Nicaragua	—	—	—	3	—	292	692	13	9	22
Nigeria	—	199	—	2	—	632	632	—	20	20
Norway	—	128	—	0	—	1,306	1,306	—	42	42
Pakistan	0	324	—	0	0	324	324	—	10	10
Panama	0	—	42	21	—	5,203	7,031	59	168	227
Peru	0	0	0	61	0	3,012	5,677	86	97	183
Philippines	0	—	—	1	0	102	102	—	3	3
Portugal	—	—	—	0	—	413	413	—	13	13
Puerto Rico	0	—	1	10	—	19	19	—	1	1
Romania	—	—	—	0	—	0	0	—	0	0
Saudi Arabia	0	116	—	3	—	135	135	—	4	4
Serbia (Excludes Kosovo) ..	—	—	—	—	—	—	—	—	—	—
Singapore	0	—	0	4	0	2,213	4,222	65	71	136
South Africa	—	43	—	58	—	568	890	10	18	29
Spain	1	422	—	2	—	1,015	3,127	68	33	101
Switzerland	—	—	—	0	—	1	1	—	0	0
Taiwan	2	—	—	4	—	1,743	5,916	135	56	191
Thailand	0	—	0	4	0	6	5,570	180	0	180
Trinidad and Tobago	—	—	—	5	0	899	899	—	29	29
Turkey	—	57	0	20	—	912	912	—	29	29
United Arab Emirates	0	2	0	45	—	50	859	26	2	28
United Kingdom	0	—	0	1	0	1,116	8,834	249	36	285
Venezuela	—	—	—	5	—	9	9	—	0	0
Other	—	718	4	48	5	4,686	6,677	64	153	217
Total	141	17,430	763	2,691	90	173,168	278,034	3,383	5,586	8,969

— = No Data Reported.

¹ On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require authorization.

Note: Totals may not equal sum of components due to independent rounding.

Sources: U.S. Census Bureau and EIA estimates.

Table 52. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January-October 2019
(Thousand Barrels)

Destination	Crude Oil ¹	Natural Gas Liquids	Refinery Olefins	Unfinished Oils	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
Argentina	13	1	—	2,544	—	1,182	1,182	—	—	—
Australia	14,038	3,478	—	7	—	2,699	2,699	4	—	4
Bahamas	—	306	—	1	—	1,005	1,005	1	1	2
Bahrain	—	—	—	0	—	3	3	—	0	0
Belgium	881	1,037	—	409	—	—	—	—	0	0
Belize	—	—	—	—	—	371	371	—	320	320
Brazil	13,742	14,297	—	10,065	—	15,753	15,753	—	2,598	2,598
Canada	138,679	79,491	—	16,678	—	8,278	8,278	—	7,319	7,319
Cayman Islands	—	80	—	—	—	473	473	1	0	1
Chile	10,320	8,421	—	78	—	1,899	1,899	—	—	—
China	46,286	5,155	—	1,486	—	15	15	0	—	0
Colombia	5,864	250	—	13,786	—	6,477	6,477	0	808	808
Costa Rica	—	1,501	—	316	—	4,216	4,216	—	—	—
Denmark	8,266	0	—	121	—	1	1	0	0	0
Dominican Republic	4,137	12,674	—	1,252	—	3,701	3,701	0	62	62
Ecuador	—	11,685	—	42	—	8,826	8,826	—	1,838	1,838
Egypt	—	4,429	—	0	—	—	—	—	1	1
El Salvador	—	2,713	—	4	—	3,642	3,642	0	0	1
Finland	—	—	—	0	—	1	1	—	—	—
France	20,844	6,802	—	219	—	2	2	—	0	0
Germany	8,916	112	—	63	—	2	2	—	0	0
Ghana	—	1,035	—	0	—	0	0	—	—	—
Gibraltar	—	1,753	—	—	—	318	318	—	—	—
Greece	2,938	0	—	—	—	0	0	—	—	—
Guatemala	—	3,963	—	37	—	11,250	11,250	0	1,560	1,560
Honduras	—	4,910	—	8	—	4,999	4,999	0	712	713
Hong Kong	—	552	—	1	—	—	—	—	1	1
India	78,251	33,346	—	44	—	0	0	1	—	1
Indonesia	630	22,066	—	19	—	—	—	—	—	—
Ireland	11,503	—	—	0	—	—	—	—	—	—
Israel	2,888	2	—	7	—	9	9	—	—	—
Italy	36,828	284	—	8	—	474	474	—	0	0
Jamaica	946	368	—	2	—	2,252	2,252	0	3	3
Japan	17,248	122,359	—	5,867	—	319	319	6	1	6
Korea, South	129,114	37,149	—	3,278	—	194	194	5	5	10
Lebanon	—	—	—	0	—	—	—	—	—	—
Mexico	533	45,009	—	2,962	—	133,117	133,117	154	11,262	11,417
Montenegro	—	—	—	—	—	—	—	—	—	—
Morocco	—	10,715	—	0	—	—	—	—	—	—
Mozambique	—	—	—	—	—	—	—	—	—	—
Netherlands	82,968	16,861	—	4,313	—	1,256	1,256	0	217	217
New Zealand	—	3	—	0	—	0	0	0	—	0
Nicaragua	3,200	—	—	1	—	1,430	1,430	—	—	—
Nigeria	—	1,746	—	130	—	796	796	—	—	—
Norway	7,083	8,486	—	243	—	1	1	—	—	—
Pakistan	—	—	—	—	—	—	—	—	—	—
Panama	13,733	2	—	5	—	6,884	6,884	—	62	62
Peru	9,386	1,691	—	24	—	5,286	5,286	—	213	213
Philippines	280	1,587	—	2	—	0	0	—	—	—
Portugal	—	4,042	—	—	—	—	—	—	—	—
Puerto Rico	—	93	—	19	—	23	23	—	2	2
Romania	—	0	—	0	—	—	—	—	—	—
Saudi Arabia	—	5	—	8	—	0	0	—	0	0
Serbia (Excludes Kosovo) ..	—	—	—	—	—	—	—	—	—	—
Singapore	19,709	4,219	—	401	—	455	455	0	50	50
South Africa	1,292	1,466	—	0	—	508	508	0	0	0
Spain	13,372	11,755	—	0	—	498	498	—	1	1
Switzerland	—	289	—	0	—	85	85	0	—	0
Taiwan	50,192	11,888	—	1,730	—	4	4	—	0	0
Thailand	33,645	0	—	8	—	—	—	—	—	—
Trinidad and Tobago	—	129	—	1	—	2,197	2,197	—	240	240
Turkey	—	7,131	—	0	—	2	2	1	—	1
United Arab Emirates	12,455	1	—	2	—	18	18	0	—	0
United Kingdom	66,719	14,371	—	3	—	9	9	0	0	0
Venezuela	—	270	—	2,040	—	1,494	1,494	7	2	9
Other	15,491	20,451	—	983	—	3,963	3,963	7	8	13
Total	882,390	542,429	—	69,217	—	236,387	236,387	187	27,286	27,473

See footnotes at end of table.

Table 52. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January-October 2019
(Thousand Barrels) — Continued

Destination	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
Argentina	—	—	1	0	—	—	9,724	310	386	—	10,420
Australia	0	0	74	—	—	—	4	—	0	—	4
Bahamas	—	1	1	—	—	—	6,532	150	2,723	—	9,405
Bahrain	—	—	0	—	—	—	—	—	—	—	—
Belgium	56	0	1	0	—	—	300	—	533	—	833
Belize	—	—	—	—	—	—	151	437	78	—	666
Brazil	0	0	6,718	0	—	—	55,328	2,304	3,794	—	61,426
Canada	—	4	6,473	2,324	—	—	1,135	4,190	1,654	—	6,980
Cayman Islands	—	—	—	0	—	—	838	—	—	—	838
Chile	2,392	—	10	—	—	—	29,849	310	462	—	30,621
China	0	4	2	—	—	—	11	299	—	—	310
Colombia	—	—	1,445	—	—	—	11,667	—	—	—	11,667
Costa Rica	24	0	2	—	—	—	6,470	—	1	—	6,471
Denmark	—	—	—	—	—	—	414	—	—	—	414
Dominican Republic	—	—	11	—	—	—	4,292	1,300	3,317	—	8,909
Ecuador	—	0	0	—	—	—	5,460	3,160	1,377	—	9,997
Egypt	—	—	0	—	—	—	192	—	—	—	192
El Salvador	—	—	—	—	—	—	1,530	3,257	—	—	4,786
Finland	—	—	223	—	—	—	58	—	—	—	58
France	—	1	95	—	—	—	9,949	1,017	1	—	10,967
Germany	0	0	0	7	—	—	1	—	—	—	1
Ghana	—	—	—	—	—	—	2	—	—	—	2
Gibraltar	—	—	—	—	—	—	4,047	499	6,281	—	10,827
Greece	—	—	0	—	—	—	—	—	—	—	—
Guatemala	—	0	0	—	—	—	5,380	5,823	922	—	12,125
Honduras	—	0	260	—	—	—	1,816	2,282	1,363	—	5,461
Hong Kong	—	0	0	0	—	—	246	—	—	—	246
India	170	0	3,601	1	—	—	32	—	—	—	32
Indonesia	59	—	0	—	—	—	—	—	—	—	—
Ireland	—	0	0	—	—	—	254	—	—	—	254
Israel	—	0	2	—	—	—	0	—	—	—	0
Italy	—	—	2	—	—	—	1,138	—	—	—	1,138
Jamaica	—	0	435	—	—	—	1,306	71	789	—	2,166
Japan	—	8,731	122	—	—	—	5	24	—	—	29
Korea, South	155	1	1,973	—	—	—	723	—	—	—	723
Lebanon	—	—	0	—	—	—	763	—	—	—	763
Mexico	7,370	7	633	13	—	—	85,024	1,002	642	—	86,667
Montenegro	—	—	—	—	—	—	—	—	—	—	—
Morocco	—	—	—	10	—	—	6,910	77	—	—	6,987
Mozambique	—	—	—	—	—	—	—	—	—	—	—
Netherlands	105	10	901	152	—	—	11,472	1,420	3,183	—	16,076
New Zealand	—	—	0	0	—	—	0	—	—	—	0
Nicaragua	—	—	—	—	—	—	377	1,302	210	—	1,888
Nigeria	—	—	411	—	—	—	0	—	—	—	0
Norway	0	—	139	—	—	—	411	—	—	—	411
Pakistan	—	—	0	—	—	—	0	—	—	—	0
Panama	—	0	0	—	—	—	9,751	1,576	5,976	—	17,304
Peru	—	0	1,035	57	—	—	20,150	—	—	—	20,150
Philippines	—	0	1,483	—	—	—	0	—	—	—	0
Portugal	—	—	—	—	—	—	—	—	—	—	—
Puerto Rico	0	2	160	—	—	—	9	72	—	—	81
Romania	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	1	333	—	—	—	2	—	—	—	2
Serbia (Excludes Kosovo) ..	—	—	—	—	—	—	—	—	—	—	—
Singapore	112	3	96	2	—	—	1,013	197	3,322	—	4,533
South Africa	—	—	0	—	—	—	1	—	—	—	1
Spain	—	—	270	—	—	—	6,385	548	450	—	7,382
Switzerland	—	0	234	6	—	—	674	—	4	—	678
Taiwan	0	0	3	—	—	—	2	9	—	—	11
Thailand	—	0	0	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	0	—	—	—	1,351	1,923	1,607	—	4,881
Turkey	—	—	22	—	—	—	2	—	—	—	2
United Arab Emirates	—	—	474	—	—	—	1	1	—	—	2
United Kingdom	—	0	575	—	—	—	10,916	—	—	—	10,916
Venezuela	259	—	—	—	—	—	276	—	—	—	276
Other	825	3	903	—	—	—	10,070	3,440	6,090	—	19,601
Total	11,527	8,768	29,123	2,572	—	—	324,414	37,000	45,165	—	406,580

See footnotes at end of table.

Table 52. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January-October 2019
(Thousand Barrels) — Continued

Destination	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil	Petrochemical Feedstocks	
							Naphtha	Other Oils
Argentina	—	—	—	1,014	—	0	—	—
Australia	—	—	—	—	—	1	—	—
Bahamas	0	—	—	644	—	3,216	—	—
Bahrain	—	—	—	0	—	—	—	—
Belgium	—	—	—	—	—	0	—	—
Belize	—	—	—	125	—	0	—	—
Brazil	0	—	—	2,498	—	671	—	—
Canada	741	—	—	15,265	—	7,581	—	—
Cayman Islands	2	—	—	220	—	2	—	—
Chile	3	—	—	2,403	—	1	—	—
China	0	—	—	0	—	6	—	—
Colombia	0	—	—	297	—	1	—	—
Costa Rica	16	—	—	1,542	—	1	—	—
Denmark	—	—	—	99	—	—	—	—
Dominican Republic	1	—	—	2,252	—	892	—	—
Ecuador	1	—	—	9	—	2,991	—	—
Egypt	0	—	—	—	—	0	—	—
El Salvador	1	—	—	266	—	0	—	—
Finland	—	—	—	453	—	0	—	—
France	0	—	—	—	—	—	—	—
Germany	—	—	—	—	—	0	—	—
Ghana	—	—	—	—	—	345	—	—
Gibraltar	—	—	—	—	—	2,633	—	—
Greece	—	—	—	—	—	—	—	—
Guatemala	30	—	—	1,921	—	481	—	—
Honduras	11	—	—	517	—	2,346	—	—
Hong Kong	0	—	—	—	—	—	—	—
India	—	—	—	1	—	66	—	—
Indonesia	—	—	—	—	—	—	—	—
Ireland	—	—	—	—	—	—	—	—
Israel	1	—	—	1,180	—	154	—	—
Italy	—	—	—	0	—	—	—	—
Jamaica	0	—	—	1,093	—	4,657	—	—
Japan	1	—	—	0	—	65	—	—
Korea, South	0	—	—	0	—	232	—	—
Lebanon	—	—	—	0	—	4,069	—	—
Mexico	160	—	—	15,973	—	15,807	—	—
Montenegro	—	—	—	—	—	—	—	—
Morocco	—	—	—	329	—	—	—	—
Mozambique	—	—	—	—	—	—	—	—
Netherlands	—	—	—	1,590	—	7,482	—	—
New Zealand	0	—	—	—	—	—	—	—
Nicaragua	1	—	—	32	—	93	—	—
Nigeria	0	—	—	—	—	—	—	—
Norway	—	—	—	293	—	—	—	—
Pakistan	0	—	—	—	—	—	—	—
Panama	1	—	—	5,003	—	6,963	—	—
Peru	1	—	—	1,432	—	1	—	—
Philippines	—	—	—	0	—	—	—	—
Portugal	—	—	—	—	—	—	—	—
Puerto Rico	0	—	—	1	—	1	—	—
Romania	—	—	—	—	—	—	—	—
Saudi Arabia	0	—	—	3	—	1	—	—
Serbia (Excludes Kosovo) ..	—	—	—	—	—	—	—	—
Singapore	1	—	—	0	—	6,248	—	—
South Africa	—	—	—	318	—	0	—	—
Spain	—	—	—	—	—	—	—	—
Switzerland	—	—	—	—	—	—	—	—
Taiwan	0	—	—	0	—	1	—	—
Thailand	—	—	—	—	—	0	—	—
Trinidad and Tobago	0	—	—	1,996	—	—	—	—
Turkey	1	—	—	4	—	—	—	—
United Arab Emirates	2	—	—	0	—	399	—	—
United Kingdom	0	—	—	1,920	—	885	—	—
Venezuela	—	—	—	18	—	1	—	—
Other	17	—	—	5,319	—	3,095	—	—
Total	992	—	—	66,030	—	71,388	—	—

See footnotes at end of table.

Table 52. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January-October 2019
(Thousand Barrels) — Continued

Destination	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Argentina	5	264	2	354	0	15,788	15,801	0	52	52
Australia	5	2,196	1	222	4	8,694	22,732	46	29	75
Bahamas	0	—	25	32	0	14,638	14,638	—	48	48
Bahrain	0	—	—	4	—	7	7	—	0	0
Belgium	0	3,305	1	4,171	11	9,824	10,705	3	32	35
Belize	—	—	—	11	0	1,494	1,494	—	5	5
Brazil	7	13,276	0	3,747	6	131,063	144,805	45	431	476
Canada	854	8,017	1,929	2,604	73	164,611	303,290	456	541	998
Cayman Islands	—	—	7	10	—	1,633	1,633	—	5	5
Chile	4	2	438	744	1	47,017	57,337	34	155	189
China	21	11,457	10	172	8	18,648	64,934	152	61	214
Colombia	2	238	3	941	3	35,918	41,782	19	118	137
Costa Rica	1	187	176	146	0	14,600	14,600	—	48	48
Denmark	0	1,002	—	0	—	1,638	9,904	27	5	33
Dominican Republic	3	1,879	983	207	1	32,828	36,965	14	108	122
Ecuador	0	1,684	1	570	0	37,645	37,645	—	124	124
Egypt	—	851	286	92	—	5,852	5,852	—	19	19
El Salvador	0	186	0	226	—	11,825	11,825	—	39	39
Finland	0	293	0	7	—	1,035	1,035	—	3	3
France	2	2,308	—	577	—	20,974	41,818	69	69	138
Germany	24	289	7	27	1	532	9,448	29	2	31
Ghana	0	—	0	2	—	1,384	1,384	—	5	5
Gibraltar	—	—	—	0	—	15,531	15,531	—	51	51
Greece	—	2,180	0	2	—	2,183	5,121	10	7	17
Guatemala	1	2,816	0	184	—	34,369	34,369	—	113	113
Honduras	0	1,988	232	125	0	21,569	21,569	—	71	71
Hong Kong	2	—	0	15	2	818	818	—	3	3
India	14	27,653	6	659	2	65,596	143,847	257	216	473
Indonesia	1	1	10	118	1	22,273	22,903	2	73	75
Ireland	0	1,267	—	0	1	1,522	13,025	38	5	43
Israel	0	1,271	0	105	0	2,731	5,620	10	9	18
Italy	2	5,191	0	30	—	7,130	43,957	121	23	145
Jamaica	0	0	1	426	1	11,404	12,350	3	38	41
Japan	36	19,121	8	117	33	156,815	174,063	57	516	573
Korea, South	2	2,052	6	67	2	45,844	174,958	425	151	576
Lebanon	—	750	—	6	—	5,589	5,589	—	18	18
Mexico	183	16,935	3,016	10,556	355	350,178	350,710	2	1,152	1,154
Montenegro	—	—	—	—	—	—	—	—	—	—
Morocco	—	3,910	1	1	—	21,952	21,952	—	72	72
Mozambique	—	762	—	—	—	762	762	—	3	3
Netherlands	23	3,309	16	571	3	52,885	135,853	273	174	447
New Zealand	1	457	0	9	—	470	470	—	2	2
Nicaragua	—	—	—	42	—	3,487	6,687	11	11	22
Nigeria	0	199	33	919	—	4,235	4,235	—	14	14
Norway	0	1,022	—	4	—	10,598	17,681	23	35	58
Pakistan	1	591	0	1	0	595	595	—	2	2
Panama	0	520	386	430	0	37,559	51,292	45	124	169
Peru	1	536	0	682	1	31,110	40,496	31	102	133
Philippines	1	303	0	15	2	3,393	3,673	1	11	12
Portugal	0	781	—	0	—	4,824	4,824	—	16	16
Puerto Rico	0	0	28	124	—	535	535	—	2	2
Romania	0	1,401	—	1	0	1,403	1,403	—	5	5
Saudi Arabia	1	429	1	44	0	827	827	—	3	3
Serbia (Excludes Kosovo) ..	—	—	0	0	—	0	0	—	—	—
Singapore	1	193	150	98	0	16,562	36,271	65	54	119
South Africa	1	663	1	499	—	3,457	4,749	4	11	16
Spain	3	3,921	0	21	0	23,851	37,222	44	78	122
Switzerland	0	—	—	1	—	1,294	1,294	—	4	4
Taiwan	11	0	2	54	1	13,707	63,899	165	45	210
Thailand	1	122	3	31	2	167	33,813	111	1	111
Trinidad and Tobago	0	0	0	77	0	9,522	9,522	—	31	31
Turkey	0	7,920	0	131	—	15,214	15,214	—	50	50
United Arab Emirates	0	1,140	6	471	0	2,514	14,969	41	8	49
United Kingdom	2	915	1	23	1	29,622	96,340	219	97	317
Venezuela	0	30	—	55	0	4,452	4,452	—	15	15
Other	7	7,747	137	757	10	63,815	79,308	51	211	258
Total	1,223	165,530	7,913	32,337	525	1,680,012	2,562,402	2,903	5,526	8,429

— = No Data Reported.

¹ On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require authorization.

Note: Totals may not equal sum of components due to independent rounding.

Sources: U.S. Census Bureau and EIA estimates.

Table 53. Net Imports of Crude Oil and Petroleum Products into the United States by Country, October 2019
(Thousand Barrels per Day)

Country of Origin	Crude Oil ¹	Natural Gas Liquids	Refinery Olefins	Unfinished Oils	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	1,172	-49	-	60	-	-35	-35	0	3	3
Algeria	-	-	-	23	-	-	-	-	-	-
Angola	54	-	-	-	-	-	-	-	9	9
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	240	-44	-	0	-	-35	-35	-	-8	-8
Equatorial Guinea	21	3	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	252	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	0	0	-	-	-
Libya	86	-	-	-	-	-	-	-	-	-
Nigeria	125	-8	-	-4	-	0	0	-	2	2
Saudi Arabia	419	-	-	24	-	0	0	-	-	-
United Arab Emirates	-26	-	-	17	-	-	-	-	-	-
Venezuela	-	0	-	0	-	0	0	0	-	0
Non-OPEC	1,689	-1,833	20	492	-	-693	-693	286	222	509
Argentina	44	-	-	2	-	-5	-5	-	3	3
Aruba	-	0	-	0	-	0	0	-	-	-
Australia	-192	-19	-	0	-	0	0	-	-	-
Bahamas	-	-1	-	-	-	-4	-4	-	0	0
Bahrain	-	-	-	-	-	0	0	-	-	-
Belgium	-20	0	-	14	-	-	-	0	7	7
Brazil	199	-21	-	-31	-	-57	-57	-	28	28
Brunei	31	-	-	-	-	-	-	-	-	-
Cameroon	17	-	-	-	-	-	-	-	-	-
Canada	3,269	-168	17	-17	-	-24	-24	141	-13	128
Chad	-	-	-	-	-	-	-	-	-	-
China	-	-9	-	0	-	0	0	-	-	-
Colombia	201	0	-	-21	-	-10	-10	-	0	0
Denmark	-70	-	-	-4	-	-	-	-	-	-
Dominican Republic	-16	-26	-	0	-	-7	-7	-	0	0
Estonia	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	0	-	19	19	2	-	2
France	-214	-23	-	14	-	-	-	19	-	19
Germany	-24	-	-	17	-	-	-	-	-	-
Guatemala	9	-13	-	0	-	-49	-49	-	-3	-3
Honduras	-	-12	-	0	-	-12	-12	0	0	0
India	-239	-210	-	12	-	-	-	-	63	63
Indonesia	-	-114	-	0	-	-	-	-	-	-
Italy	-128	-2	-	12	-	0	0	-	-	-
Japan	-75	-387	-	-53	-	0	0	-	-	-
Korea, South	-395	-193	-	-33	-	21	21	0	9	9
Latvia	-	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-	-
Malaysia	-	0	-	-	-	-	-	-	-	-
Mexico	491	-177	-	28	-	-484	-484	-1	-4	-5
Netherlands	-421	-67	-	17	-	9	9	32	33	64
Norway	9	-28	-	27	-	-	-	-	3	3
Oman	-	-	-	0	-	-	-	-	-	-
Panama	-59	0	-	0	-	-36	-36	-	-	-
Portugal	-	-13	-	-	-	8	8	-	-	-
Puerto Rico	-	0	-	0	-	0	0	-	-	-
Qatar	-	0	-	0	-	0	0	-	1	1
Russia	155	0	-	421	-	-	-	21	59	80
Spain	-68	-19	-	11	-	18	18	-	21	21
Sweden	-19	-21	-	3	-	-	-	-	-	-
Trinidad and Tobago	69	0	-	0	-	-10	-10	-	-	-
United Kingdom	-220	-31	-	0	-	19	19	73	-	73
Vietnam	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-8	-	-	-	0	0	-	-	-
Yemen	-	-	-	-	-	-	-	-	-	-
Other	-645	-271	3	73	-	-89	-89	-1	15	16
Total	2,861	-1,882	20	552	-	-728	-728	286	225	512
Persian Gulf²	645	0	-	41	-	0	0	-	1	1

See footnotes at end of table.

Table 53. Net Imports of Crude Oil and Petroleum Products into the United States by Country, October 2019
(Thousand Barrels per Day) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	-	-	-3	-	-	-	0	-8	-10	-	-18
Algeria	-	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-8	-10	-	-18
Equatorial Guinea	-	-	-	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-2	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	0	-	-	-	0	-	-	-	0
United Arab Emirates	-	-	-	-	-	-	0	0	-	-	0
Venezuela	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	-22	-27	-67	5	22	-	-727	-120	-149	-	-997
Argentina	-	-	-	-	-	-	-10	-	-	-	-10
Aruba	-	-	-	-	-	-	-6	-	-	-	-6
Australia	-	0	0	-	-	-	-	-	0	-	0
Bahamas	-	-	-	-	-	-	-31	-	-9	-	-40
Bahrain	-	-	-	-	-	-	-	-	-	-	-
Belgium	-	-	0	-	-	-	-	-	-	-	-
Brazil	1	4	8	-	-	-	-172	-21	-4	-	-197
Brunei	-	-	-	-	-	-	-	-	-	-	-
Cameroon	-	-	0	-	-	-	0	-	-	-	0
Canada	-	0	-23	3	-	-	140	-20	-6	-	114
Chad	-	-	-	-	-	-	-	-	-	-	-
China	-	0	0	-	-	-	0	-	-	-	0
Colombia	-	-	-7	-	-	-	-10	-	-	-	-10
Denmark	-	-	-	-	-	-	-	-	-	-	-
Dominican Republic	-	-	0	-	-	-	-8	-	-32	-	-40
Estonia	-	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-2	-	-	-	-	-	-	-	-
France	-	0	0	-	-	-	-	-	-	-	-
Germany	-	0	0	2	-	-	0	-	-	-	0
Guatemala	-	0	0	-	-	-	-14	-22	-2	-	-38
Honduras	-	-	-8	-	-	-	-3	-9	-	-	-12
India	-	0	-14	-	-	-	0	-	-	-	0
Indonesia	-	-	0	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-3	-	-	-	-3
Japan	-	-31	-1	-	-	-	0	-	-	-	0
Korea, South	-	0	-7	1	-	-	0	-	-	-	0
Latvia	-	-	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-	-	-
Malaysia	-	0	0	-	-	-	0	-	-	-	0
Mexico	-16	0	-2	0	-	-	-293	0	-2	-	-294
Netherlands	-	0	-2	-	-	-	-5	-9	-9	-	-23
Norway	-	-	0	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-	-
Panama	-	0	-	-	-	-	-46	-7	-56	-	-109
Portugal	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	0	0	0	-	-	-	0	-	-	-	0
Qatar	-	-	-	-	-	-	-	-	-	-	-
Russia	-	-	-	-	-	-	-	-	-	-	-
Spain	-	-	0	-	-	-	0	-	-1	-	-1
Sweden	-	-	-	-	-	-	-	-	-	-	-
Trinidad and Tobago	-	-	0	-	-	-	-3	-9	0	-	-11
United Kingdom	-	-	-3	-	-	-	-3	-	-	-	-3
Vietnam	-	0	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-2	-	-4	-	-6
Yemen	-	-	-	-	-	-	-	-	-	-	-
Other	-7	0	-6	-1	22	-	-258	-23	-24	-	-308
Total	-22	-27	-70	5	22	-	-727	-129	-159	-	-1,015
Persian Gulf²	-	-	0	-	-	-	0	0	-	-	0

See footnotes at end of table.

Table 53. Net Imports of Crude Oil and Petroleum Products into the United States by Country, October 2019
(Thousand Barrels per Day) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil	Petrochemical Feedstocks	
							Naphtha	Other Oils
OPEC	0	-	-	7	1	5	-	-
Algeria	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	12	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-
Ecuador	0	-	-	7	-	-7	-	-
Equatorial Guinea	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-
Nigeria	0	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	1	-	-	-
United Arab Emirates	0	-	-	-	-	-	-	-
Venezuela	-	-	-	0	-	-	-	-
Non-OPEC	2	1	-	-81	16	-36	9	2
Argentina	-	-	-	-4	-	18	-	-
Aruba	0	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-
Bahamas	0	-	-	-3	-	14	-	-
Bahrain	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-
Brazil	-	-	-	-21	1	-1	-	-
Brunei	-	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-
Canada	-6	0	-	-42	3	-18	2	2
Chad	-	-	-	-	-	-	-	-
China	0	-	-	10	-	0	-	-
Colombia	-	-	-	-	-	16	-	-
Denmark	-	-	-	-	-	-	-	-
Dominican Republic	0	-	-	-4	-	0	-	-
Estonia	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	0	-	-
France	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	0	-	-
Guatemala	0	-	-	-5	-	-1	-	-
Honduras	0	-	-	-1	-	-8	-	-
India	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-
Italy	-	-	-	0	-	-	-	-
Japan	9	-	-	21	-	-	-	-
Korea, South	-	-	-	85	12	-	-	-
Latvia	-	-	-	-	-	-	-	-
Lithuania	0	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	0	-	-
Mexico	0	-	-	-51	-	-24	5	-
Netherlands	-	-	-	-	-	-16	-	-
Norway	-	-	-	-9	-	-	-	-
Oman	-	-	-	-	-	8	-	-
Panama	0	-	-	-17	-	-3	-	-
Portugal	-	-	-	-	-	-	-	-
Puerto Rico	-	-	-	0	-	-	-	-
Qatar	0	-	-	-	-	-	-	-
Russia	-	-	-	-	-	13	-	-
Spain	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-
Trinidad and Tobago	0	-	-	-8	-	-	-	-
United Kingdom	-	-	-	-	-	-	0	-
Vietnam	-	-	-	-	-	0	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	-	-	-
Other	-1	1	-	-32	0	-34	2	0
Total	2	1	-	-74	17	-30	9	2
Persian Gulf²	0	-	-	-	1	-	-	-

See footnotes at end of table.

Table 53. Net Imports of Crude Oil and Petroleum Products into the United States by Country, October 2019
(Thousand Barrels per Day) — Continued

Country of Origin	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products
OPEC	0	-16	0	1	-	-43	1,129
Algeria	-	-	-	0	-	23	23
Angola	-	-	-	-	-	21	75
Congo (Brazzaville)	-	-	-	-	-	-	-
Ecuador	0	-6	0	-1	-	-112	128
Equatorial Guinea	-	-	-	0	-	3	24
Gabon	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-
Iraq	-	-	-	0	-	0	252
Kuwait	0	0	-	0	-	0	0
Libya	-	-	-	0	-	0	86
Nigeria	-	-6	-	0	-	-18	107
Saudi Arabia	0	-4	-	0	-	21	440
United Arab Emirates	0	0	0	3	-	20	-6
Venezuela	-	-	-	0	-	0	0
Non-OPEC	2	-538	23	-13	-3	-3,207	-1,519
Argentina	0	-	0	-1	-	2	46
Aruba	-	-	-	0	-	-6	-6
Australia	0	-14	0	-1	0	-34	-227
Bahamas	-	-	0	0	-	-34	-34
Bahrain	-	-	-	3	-	3	3
Belgium	0	-7	-	-11	0	2	-18
Brazil	0	-30	-	-11	0	-326	-127
Brunei	-	-	-	0	-	0	31
Cameroon	-	-	-	0	-	0	17
Canada	-1	-29	31	1	0	-29	3,240
Chad	-	-	-	-	-	-	-
China	1	-27	0	0	0	-25	-25
Colombia	0	-	2	-3	0	-34	167
Denmark	0	-5	-	0	-	-9	-79
Dominican Republic	0	-5	-2	0	0	-85	-102
Estonia	-	-	-	-	-	-	-
Finland	-	-	-	0	-	19	19
France	0	-18	-	0	-	-8	-222
Germany	0	0	0	0	0	20	-4
Guatemala	-	-9	-	-1	-	-118	-109
Honduras	-	-18	-1	0	-	-73	-73
India	0	-97	0	-1	0	-247	-487
Indonesia	0	0	0	4	0	-110	-110
Italy	0	-31	-	0	-	-24	-152
Japan	1	-53	0	0	0	-495	-570
Korea, South	0	0	0	24	0	-81	-477
Latvia	-	-	-	0	-	0	0
Lithuania	-	-	-	0	-	0	0
Malaysia	0	-9	-	0	0	-9	-9
Mexico	-1	-68	-9	-32	-2	-1,132	-641
Netherlands	0	-18	0	-2	0	-38	-458
Norway	-	-4	-	0	-	-13	-4
Oman	-	0	-	0	-	8	8
Panama	0	-	-1	-1	-	-168	-227
Portugal	-	-	-	0	-	-5	-5
Puerto Rico	0	-	0	0	-	-1	-1
Qatar	-	-	-	19	-	20	20
Russia	0	0	-	7	-	520	675
Spain	0	-14	8	0	-	25	-43
Sweden	0	-	-	3	-	-16	-35
Trinidad and Tobago	-	-	-	0	0	-29	40
United Kingdom	1	-	0	0	0	57	-163
Vietnam	-	-	0	0	-	0	0
Virgin Islands, U.S.	-	-	-	0	-	-15	-15
Yemen	-	-	-	0	-	0	0
Other	1	-82	-5	-10	-1	-719	-1,362
Total	2	-554	23	-12	-3	-3,250	-389
Persian Gulf²	0	-4	0	24	-	63	709

- = No Data Reported.

¹ On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require authorization.

² Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Sources: U.S. Census Bureau and EIA estimates.

Table 54. Year-to-Date Net Imports of Crude Oil and Petroleum Products into the United States by Country, January-October 2019
(Thousand Barrels per Day)

Country of Origin	Crude Oil ¹	Natural Gas Liquids	Refinery Olefins	Unfinished Oils	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	1,482	-45	-	107	-	-36	-36	0	18	19
Algeria	21	-	-	66	-	-	-	-	-	-
Angola	36	-	-	3	-	-	-	-	2	2
Congo (Brazzaville)	18	-	-	-	-	-	-	-	-	-
Ecuador	189	-38	-	4	-	-29	-29	-	-6	-6
Equatorial Guinea	11	1	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	335	-	-	1	-	-	-	-	-	-
Kuwait	46	0	-	0	0	0	0	0	-	0
Libya	60	-	-	4	-	-	-	-	-	-
Nigeria	187	-6	-	1	-	-3	-3	-	5	5
Saudi Arabia	519	0	-	17	0	0	0	0	8	8
United Arab Emirates	-38	0	-	18	-	0	0	0	4	4
Venezuela	97	-1	-	-7	-	-5	-5	0	4	4
Non-OPEC	2,504	-1,557	21	294	-	-659	-659	186	423	610
Argentina	36	1	-	-8	-	-4	-4	-	2	2
Aruba	-	0	-	0	-	-1	-1	-	-	-
Australia	-46	-11	-	1	-	-9	-9	0	-	0
Bahamas	-	-1	-	0	-	-3	-3	0	0	0
Bahrain	-	-	-	0	0	0	0	-	0	0
Belgium	-3	-3	-	45	-	2	2	5	18	22
Brazil	82	-47	-	-29	-	-52	-52	-	47	47
Brunei	26	-	-	-1	-	-	-	-	-	-
Cameroon	6	-	-	3	-	-	-	-	-	-
Canada	3,365	-83	17	-33	-	-11	-11	92	33	125
Chad	6	-	-	-	-	-	-	-	0	0
China	-152	-17	-	-5	-	0	0	0	2	2
Colombia	310	-1	-	-43	-	-21	-21	0	11	11
Denmark	-13	0	-	1	-	0	0	0	1	1
Dominican Republic	-14	-41	-	-4	-	-12	-12	0	0	0
Estonia	-	-	-	-	-	0	0	-	-	-
Finland	-	-	-	1	-	3	3	1	24	24
France	-69	-22	0	3	-	15	15	6	4	10
Germany	-29	0	-	6	-	0	0	0	2	2
Guatemala	7	-13	-	0	-	-37	-37	0	-5	-5
Honduras	-	-16	-	0	-	-16	-16	0	-2	-2
India	-257	-110	-	7	-	0	0	0	71	71
Indonesia	-2	-73	-	0	-	-	-	-	2	2
Italy	-121	-1	-	11	-	-1	-1	0	16	16
Japan	-57	-402	-	-16	-	1	1	0	8	8
Korea, South	-425	-122	-	-10	-	9	9	0	7	7
Latvia	-	-	-	0	-	0	0	-	0	0
Lithuania	-2	-	-	0	-	-	-	-	4	4
Malaysia	-2	0	-	1	-	0	0	-	1	1
Mexico	601	-148	1	-7	-	-438	-438	-1	-32	-32
Netherlands	-271	-55	-	-3	-	4	4	34	50	84
Norway	30	-27	-	16	-	1	1	2	20	22
Oman	-	-	-	-1	-	-	-	-	0	0
Panama	-45	0	-	0	-	-23	-23	-	0	0
Portugal	-	-13	-	-	-	1	1	3	23	26
Puerto Rico	-	0	-	0	-	0	0	-	0	0
Qatar	-	0	-	0	-	0	0	-	0	0
Russia	135	0	-	271	-	3	3	3	43	45
Spain	-43	-39	-	10	-	3	3	0	28	28
Sweden	-4	-16	-	5	-	1	1	0	3	3
Trinidad and Tobago	45	0	-	0	-	-7	-7	-	0	0
United Kingdom	-151	-47	-	6	-	15	15	42	18	61
Vietnam	-7	-2	-	0	-	0	0	-	0	0
Virgin Islands, U.S.	-	-10	-	-	-	-1	-1	0	-	0
Yemen	-	-	-	-	-	-	-	-	-	-
Other	-432	-238	3	67	-	-81	-81	-1	24	25
Total	3,985	-1,602	21	401	-	-695	-695	187	442	628
Persian Gulf²	863	0	-	36	-	0	0	0	13	13

See footnotes at end of table.

Table 54. Year-to-Date Net Imports of Crude Oil and Petroleum Products into the United States by Country, January-October 2019
(Thousand Barrels per Day) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	-1	0	-4	-	-	-	-13	-12	-5	1	-30
Algeria	-	-	0	-	-	-	-1	-2	-1	-	-3
Angola	-	0	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	0	0	-	-	-	-18	-10	-5	1	-32
Equatorial Guinea	-	-	-	-	-	-	0	-	0	-	0
Gabon	-	-	-	-	-	-	0	-	-	-	0
Iran	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	0	-	-	-	0
Kuwait	-	-	-	-	-	-	0	-	-	-	0
Libya	-	-	-	-	-	-	0	-	-	-	0
Nigeria	-	-	-1	-	-	-	1	-	-	-	1
Saudi Arabia	-	0	-1	-	-	-	4	-	-	-	4
United Arab Emirates	-	-	-2	-	-	-	1	0	-	-	1
Venezuela	-1	-	-	-	-	-	0	-	-	-	0
Non-OPEC	-36	-26	-79	2	16	-	-884	-108	-138	5	-1,124
Argentina	1	-	0	0	-	-	-32	-1	-1	-	-34
Aruba	-	-	0	-	-	-	-1	-	-	-	-1
Australia	0	0	0	-	-	-	0	-	0	-	0
Bahamas	-	0	0	-	-	-	-20	0	-9	1	-28
Bahrain	-	-	0	-	-	-	-	-	-	-	-
Belgium	0	0	0	0	-	-	-1	-	-2	-	-3
Brazil	0	3	-9	0	-	-	-182	-8	-12	-	-202
Brunei	-	-	-	-	-	-	0	-	-	-	0
Cameroon	-	-	0	-	-	-	0	-	-	-	0
Canada	-	0	-21	-3	-	-	100	-13	-2	2	88
Chad	-	-	-	-	-	-	-	-	-	-	-
China	0	0	0	-	-	-	1	-1	-	-	0
Colombia	-	-	-5	-	-	-	-15	-	-	-	-15
Denmark	-	-	-	-	-	-	-1	-	-	-	-1
Dominican Republic	-	-	0	-	-	-	-14	-4	-11	-	-29
Estonia	-	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-1	-	-	-	0	-	-	-	0
France	-	0	0	0	-	-	-33	-3	0	-	-36
Germany	0	0	0	3	-	-	0	-	0	-	0
Guatemala	-	0	0	-	-	-	-18	-19	-3	-	-40
Honduras	-	0	-1	-	-	-	-6	-8	-4	-	-18
India	-1	0	-12	0	-	-	21	-	-	-	21
Indonesia	0	-	0	-	-	-	1	-	-	-	1
Italy	-	-	0	-	-	-	-4	-	-	-	-4
Japan	-	-29	0	-	-	-	0	0	-	-	0
Korea, South	-1	0	-6	1	-	-	-1	-	-	-	-1
Latvia	-2	-	-	-	-	-	0	-	-	-	0
Lithuania	-	-	-	-	-	-	-	-	-	-	-
Malaysia	-1	0	0	-	-	-	2	-	-1	-	0
Mexico	-24	0	-2	0	-	-	-280	-3	-2	-	-285
Netherlands	0	0	-3	-1	-	-	-38	-5	-10	-	-52
Norway	0	-	0	-	-	-	-1	-	-	-	-1
Oman	-	-	-2	-	-	-	0	-	-	-	0
Panama	-	0	0	-	-	-	-32	-5	-20	-	-57
Portugal	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	0	0	-1	-	-	-	0	0	-	-	0
Qatar	-	-	0	-	-	-	7	-	-	-	7
Russia	-	0	0	-	-	-	1	1	-	2	4
Spain	-	-	-1	1	-	-	-21	-2	-1	-	-24
Sweden	-	-	0	-	-	-	0	-	-	-	0
Trinidad and Tobago	-	-	0	-	-	-	-4	-6	-5	-	-16
United Kingdom	-	0	-2	-	-	-	-36	-	-	-	-36
Vietnam	-	0	0	-	-	-	0	-	-	-	0
Virgin Islands, U.S.	-	-	0	-	-	-	-3	0	-6	-	-10
Yemen	-	-	-	-	-	-	-	-	-	-	-
Other	-8	0	-13	1	16	-	-274	-31	-49	0	-352
Total	-37	-26	-83	2	16	-	-897	-120	-144	6	-1,154
Persian Gulf²	-	0	-3	-	-	-	11	0	-	-	11

See footnotes at end of table.

Table 54. Year-to-Date Net Imports of Crude Oil and Petroleum Products into the United States by Country, January-October 2019
(Thousand Barrels per Day) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil	Petrochemical Feedstocks	
							Naphtha	Other Oils
OPEC	0	-	-	6	0	1	-	-
Algeria	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	1	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-
Ecuador	0	-	-	1	-	-9	-	-
Equatorial Guinea	-	-	-	-	-	-	-	-
Gabon	0	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-
Iraq	0	-	-	0	-	0	-	-
Kuwait	-	-	-	0	-	-	-	-
Libya	-	-	-	0	-	0	-	-
Nigeria	0	-	-	0	-	-	-	-
Saudi Arabia	0	-	-	2	0	2	-	-
United Arab Emirates	0	-	-	2	-	-1	-	-
Venezuela	-	-	-	0	-	8	-	-
Non-OPEC	-2	1	-	-56	16	-95	14	3
Argentina	-	-	-	-3	-	9	-	-
Aruba	0	-	-	-1	-	-	-1	-
Australia	-	-	-	-	-	0	-	-
Bahamas	0	-	-	-2	-	-7	-	-
Bahrain	-	-	-	0	-	-	-	-
Belgium	-	-	-	-	-	0	0	-
Brazil	0	-	-	-8	1	-1	-	0
Brunei	-	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-
Canada	-2	0	-	-28	2	8	3	2
Chad	-	-	-	-	-	-	-	-
China	0	-	-	5	-	0	-	-
Colombia	0	-	-	-1	-	15	-	-
Denmark	-	-	-	0	-	-	-	-
Dominican Republic	0	-	-	-7	-	-3	-	-
Estonia	-	-	-	-	-	-	-	-
Finland	-	-	-	-1	-	0	-1	-
France	0	-	-	-	0	-	-	0
Germany	-	-	-	-	-	0	-	-
Guatemala	0	-	-	-6	-	-2	-	-
Honduras	0	-	-	-2	-	-8	-	-
India	-	-	-	2	1	0	-	-
Indonesia	-	-	-	-	-	-	-	-
Italy	-	-	-	0	-	-	0	-
Japan	1	-	-	20	3	0	2	0
Korea, South	0	0	-	93	8	-1	0	-
Latvia	-	-	-	0	-	-	-	-
Lithuania	0	-	-	-	-	-	-	-
Malaysia	0	-	-	-	-	-1	-	-
Mexico	-1	-	-	-53	1	-26	6	-
Netherlands	-	1	-	-5	0	-21	-	-
Norway	-	-	-	-1	-	1	-	-
Oman	-	-	-	-	-	1	-	-
Panama	0	-	-	-12	-	-23	-	-
Portugal	-	-	-	-	-	-	-	-
Puerto Rico	0	-	-	0	-	0	-	-
Qatar	0	-	-	2	-	-	-	-
Russia	-	-	-	0	0	25	-	-
Spain	-	-	-	-	-	-	-	-
Sweden	-	-	-	0	-	1	-	-
Trinidad and Tobago	0	-	-	-7	-	-	-	-
United Kingdom	0	-	-	-6	-	-3	1	-
Vietnam	0	-	-	0	-	0	-	-
Virgin Islands, U.S.	0	-	-	-6	-	-6	-	-
Yemen	-	-	-	-	-	-	-	-
Other	0	0	-	-29	0	-53	2	1
Total	-2	1	-	-51	17	-94	14	3
Persian Gulf²	0	-	-	6	0	1	-	-

See footnotes at end of table.

Table 54. Year-to-Date Net Imports of Crude Oil and Petroleum Products into the United States by Country, January-October 2019
(Thousand Barrels per Day) — Continued

Country of Origin	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products
OPEC	0	-11	0	-2	0	3	1,485
Algeria	—	—	0	1	—	64	85
Angola	—	—	0	0	—	6	42
Congo (Brazzaville)	—	—	—	—	—	—	19
Ecuador	0	-6	0	-2	0	-118	71
Equatorial Guinea	—	—	—	0	—	1	11
Gabon	—	—	0	0	—	0	0
Iran	—	—	—	—	—	—	—
Iraq	—	—	0	0	—	1	336
Kuwait	0	0	0	0	—	0	46
Libya	—	—	—	0	—	4	64
Nigeria	0	-1	0	-3	—	-6	181
Saudi Arabia	0	-1	0	0	0	31	550
United Arab Emirates	0	-4	0	2	0	20	-18
Venezuela	0	0	0	0	0	-1	96
Non-OPEC	1	-527	17	-57	-2	-3,225	-721
Argentina	0	2	0	-1	0	-36	0
Aruba	—	—	0	0	—	-4	-4
Australia	0	-7	0	-1	0	-27	-73
Bahamas	0	—	0	0	0	-42	-42
Bahrain	0	—	—	2	—	2	2
Belgium	0	-11	0	-13	0	39	36
Brazil	0	-43	0	-12	0	-352	-270
Brunei	—	—	—	0	—	-1	25
Cameroon	—	—	—	0	—	3	9
Canada	-1	-25	29	-1	0	66	3,431
Chad	—	—	—	0	—	0	6
China	2	-38	0	-1	0	-52	-204
Colombia	0	-1	0	-3	0	-63	247
Denmark	0	-3	—	0	—	-3	-15
Dominican Republic	0	-6	-3	-1	0	-107	-121
Estonia	—	—	—	0	—	0	0
Finland	0	-1	0	0	—	24	24
France	0	-8	—	-1	—	-38	-107
Germany	0	-1	0	1	0	12	-18
Guatemala	0	-9	0	-1	—	-113	-106
Honduras	0	-7	-1	0	0	-71	-71
India	0	-91	0	-2	0	-113	-371
Indonesia	0	0	0	2	0	-68	-70
Italy	0	-17	0	0	—	5	-116
Japan	0	-63	0	0	0	-477	-534
Korea, South	0	-7	0	13	0	-16	-441
Latvia	—	—	—	0	0	-2	-2
Lithuania	0	0	—	0	—	4	2
Malaysia	0	-3	0	0	0	-2	-4
Mexico	-1	-56	-10	-35	-1	-1,109	-508
Netherlands	0	-11	0	-2	0	-65	-336
Norway	0	-3	—	0	—	7	37
Oman	—	1	0	0	—	-2	-2
Panama	0	-2	-1	-1	0	-120	-165
Portugal	0	-3	—	0	—	11	11
Puerto Rico	0	0	0	0	—	-2	-2
Qatar	0	-1	0	12	—	20	20
Russia	0	0	0	1	—	349	484
Spain	0	-13	4	0	0	-31	-75
Sweden	0	-1	—	0	0	-8	-11
Trinidad and Tobago	0	0	0	0	0	-30	15
United Kingdom	0	-3	0	0	0	-13	-164
Vietnam	0	0	0	0	0	-2	-9
Virgin Islands, U.S.	—	—	0	0	0	-33	-33
Yemen	—	—	—	0	—	0	0
Other	1	-96	-1	-13	-1	-765	-1,196
Total	1	-538	17	-59	-2	-3,222	763
Persian Gulf²	0	-6	0	15	0	74	937

— = No Data Reported.

¹ On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require authorization.

² Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

Note: Totals may not equal sum of components due to independent rounding.

Sources: U.S. Census Bureau and EIA estimates.

Table 55. Stocks of Crude Oil and Petroleum Products by PAD District, October 2019
(Thousand Barrels)

Commodity	PAD Districts					U.S. Total
	1	2	3	4	5	
Crude Oil	10,744	134,625	865,968	23,044	51,006	1,085,387
Refinery	7,699	13,418	46,014	2,925	22,036	92,092
Tank Farms and Pipelines (Includes Cushing, OK)	3,045	121,207	178,801	20,119	25,212	348,384
Cushing, Oklahoma	—	47,400	—	—	—	47,400
Leases	—	—	—	—	—	—
Strategic Petroleum Reserve ¹	—	—	641,153	—	—	641,153
Alaskan In Transit	—	—	—	—	3,758	3,758
Total Stocks, All Oils (excluding Crude Oil)²	145,987	178,022	415,891	21,033	87,377	848,310
Refinery	15,301	49,384	132,124	10,650	50,066	257,525
Bulk Terminal	103,631	91,035	224,858	6,266	32,051	457,841
Pipeline	26,802	35,297	56,578	3,941	4,738	127,356
Natural Gas Processing Plant	253	2,306	2,331	176	522	5,588
Natural Gas Liquids	11,110	60,389	165,052	4,741	6,418	247,710
Refinery	482	4,721	7,674	349	1,872	15,098
Bulk Terminal	8,786	37,495	134,339	2,109	4,024	186,753
Pipeline	1,589	15,867	20,708	2,107	—	40,271
Natural Gas Processing Plant	253	2,306	2,331	176	522	5,588
Ethane	520	5,856	52,735	495	—	59,606
Refinery	—	—	186	—	—	186
Bulk Terminal	250	2,761	45,141	—	—	48,152
Pipeline	270	2,854	7,163	490	—	10,777
Natural Gas Processing Plant	—	241	245	5	—	491
Propane	8,210	25,626	56,537	1,775	2,512	94,660
Refinery	92	1,464	1,338	29	84	3,007
Bulk Terminal	6,941	19,423	48,012	860	2,317	77,553
Pipeline	1,071	3,531	6,911	819	—	12,332
Natural Gas Processing Plant	106	1,208	276	67	111	1,768
Normal Butane	1,932	16,816	37,507	1,816	3,444	61,515
Refinery	267	2,285	4,151	206	1,396	8,305
Bulk Terminal	1,433	12,869	29,548	1,226	1,704	46,780
Pipeline	172	1,295	2,403	337	—	4,207
Natural Gas Processing Plant	60	367	1,405	47	344	2,223
Isobutane	176	1,979	8,269	284	416	11,124
Refinery	123	588	1,389	104	389	2,593
Bulk Terminal	—	549	5,390	—	—	5,939
Pipeline	39	657	1,250	164	—	2,110
Natural Gas Processing Plant	14	185	240	16	27	482
Natural Gasoline	272	10,112	10,004	371	46	20,805
Refinery	—	384	610	10	3	1,007
Bulk Terminal	162	1,893	6,248	23	3	8,329
Pipeline	37	7,530	2,981	297	—	10,845
Natural Gas Processing Plant	73	305	165	41	40	624
Refinery Olefins	266	583	8,328	135	117	9,429
Refinery	266	579	3,718	135	117	4,815
Bulk Terminal	—	4	4,610	—	—	4,614
Pipeline	—	—	—	—	—	—
Natural Gas Processing Plant	—	—	—	—	—	—
Ethylene	—	—	0	—	—	0
Refinery	—	—	0	—	—	0
Bulk Terminal	—	—	—	—	—	—
Pipeline	—	—	—	—	—	—
Natural Gas Processing Plant	—	—	—	—	—	—
Propylene	145	488	6,020	0	11	6,664
Refinery	145	484	1,410	0	11	2,050
Bulk Terminal	—	4	4,610	—	—	4,614
Pipeline	—	—	—	—	—	—
Natural Gas Processing Plant	—	—	—	—	—	—
Normal Butylene	121	95	2,308	135	106	2,765
Refinery	121	95	2,308	135	106	2,765
Bulk Terminal	—	—	—	—	—	—
Pipeline	—	—	—	—	—	—
Natural Gas Processing Plant	—	—	—	—	—	—
Isobutylene	0	0	0	0	0	0
Refinery	0	0	0	0	0	0
Bulk Terminal	—	—	—	—	—	—
Pipeline	—	—	—	—	—	—
Natural Gas Processing Plant	—	—	—	—	—	—
Other Hydrocarbons	—	22	—	—	—	22
Refinery	—	22	—	—	—	22
Oxygenates (excluding Fuel Ethanol)	—	2	1,463	—	—	1,465
Refinery	—	—	—	—	—	—
Bulk Terminal	—	2	1,463	—	—	1,465
Pipeline	—	—	—	—	—	—

See footnotes at end of table.

Table 55. Stocks of Crude Oil and Petroleum Products by PAD District, October 2019
(Thousand Barrels) — Continued

Commodity	PAD Districts					U.S. Total
	1	2	3	4	5	
MTBE	—	—	1,324	—	—	1,324
Refinery	—	—	—	—	—	—
Bulk Terminal ³	—	—	1,324	—	—	1,324
Pipeline	—	—	—	—	—	—
Other Oxygenates⁴	—	2	139	—	—	141
Refinery	—	—	—	—	—	—
Bulk Terminal	—	2	139	—	—	141
Pipeline	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	8,016	7,992	6,344	430	4,601	27,383
Refinery	175	141	535	185	320	1,356
Bulk Terminal	7,841	7,851	5,809	245	4,281	26,027
Pipeline	—	—	—	—	—	—
Fuel Ethanol²	6,851	7,157	4,573	353	2,850	21,784
Refinery	167	107	221	113	28	636
Bulk Terminal	6,684	7,050	4,352	240	2,822	21,148
Pipeline	—	—	—	—	—	—
Renewable Diesel Fuel⁵	1,165	835	1,771	77	1,711	5,559
Refinery	8	34	314	72	292	720
Bulk Terminal	1,157	801	1,457	5	1,419	4,839
Pipeline	—	—	—	—	—	—
Other Renewable Fuels	—	—	—	—	40	40
Refinery	—	—	—	—	—	—
Bulk Terminal	—	—	—	—	40	40
Pipeline	—	—	—	—	—	—
Unfinished Oils	4,696	14,615	55,455	3,589	19,992	98,347
Naphthas and Lighter	1,272	3,762	13,121	820	3,242	22,217
Refinery	1,272	3,740	11,280	820	2,926	20,038
Bulk Terminal	—	22	1,841	—	316	2,179
Kerosene and Light Gas Oils	698	2,284	9,943	810	4,167	17,902
Refinery	698	2,284	7,181	810	3,927	14,900
Bulk Terminal	—	—	2,762	—	240	3,002
Heavy Gas Oils	2,029	5,895	24,906	1,099	10,040	43,969
Refinery	2,029	5,819	19,982	1,099	9,500	38,429
Bulk Terminal	—	76	4,924	—	540	5,540
Residuum	697	2,674	7,485	860	2,543	14,259
Refinery	697	2,369	7,261	860	2,521	13,708
Bulk Terminal	—	305	224	—	22	551
Motor Gasoline Blending Components²	56,317	40,144	74,802	5,231	24,838	201,332
Refinery	4,388	12,527	28,631	2,888	14,240	62,674
Bulk Terminal	41,188	19,588	30,055	1,370	7,968	100,169
Pipeline	10,741	8,029	16,116	973	2,630	38,489
Reformulated - RBOB	19,190	5,031	11,375	—	11,540	47,136
Refinery	995	942	1,774	—	5,222	8,933
Bulk Terminal	13,665	3,197	5,400	—	4,901	27,163
Pipeline	4,530	892	4,201	—	1,417	11,040
Conventional	37,127	35,113	63,427	5,231	13,298	154,196
Refinery	3,393	11,585	26,857	2,888	9,018	53,741
Bulk Terminal	27,523	16,391	24,655	1,370	3,067	73,006
Pipeline	6,211	7,137	11,915	973	1,213	27,449
CBOB	25,611	27,779	34,594	3,870	6,347	98,201
Refinery	565	5,026	11,332	1,530	2,226	20,679
Bulk Terminal	18,835	15,769	11,370	1,367	2,916	50,257
Pipeline	6,211	6,984	11,892	973	1,205	27,265
GTAB	311	—	—	—	—	311
Refinery	—	—	—	—	—	—
Bulk Terminal	311	—	—	—	—	311
Pipeline	—	—	—	—	—	—
Other	11,205	7,334	28,833	1,361	6,951	55,684
Refinery	2,828	6,559	15,525	1,358	6,792	33,062
Bulk Terminal	8,377	622	13,285	3	151	22,438
Pipeline	—	153	23	—	8	184
Aviation Gasoline Blending Components	—	—	49	—	—	49
Refinery	—	—	49	—	—	49
Bulk Terminal	—	—	—	—	—	—
Finished Motor Gasoline	3,923	6,991	8,388	1,435	2,583	23,320
Refinery	57	1,413	3,530	595	705	6,300
Bulk Terminal	1,612	2,786	3,113	589	1,645	9,745
Pipeline	2,254	2,792	1,745	251	233	7,275
Reformulated	24	—	—	—	16	40
Refinery	—	—	—	—	16	16
Bulk Terminal	24	—	—	—	—	24
Pipeline	—	—	—	—	—	—
Reformulated (Blended with Fuel Ethanol)	24	—	—	—	16	40
Refinery	—	—	—	—	16	16
Bulk Terminal	24	—	—	—	—	24
Pipeline	—	—	—	—	—	—

See footnotes at end of table.

Table 55. Stocks of Crude Oil and Petroleum Products by PAD District, October 2019
(Thousand Barrels) — Continued

Commodity	PAD Districts					U.S. Total
	1	2	3	4	5	
Reformulated (Other)	—	—	—	—	—	—
Refinery	—	—	—	—	—	—
Bulk Terminal	—	—	—	—	—	—
Pipeline	—	—	—	—	—	—
Conventional	3,899	6,991	8,388	1,435	2,567	23,280
Refinery	57	1,413	3,530	595	689	6,284
Bulk Terminal	1,588	2,786	3,113	589	1,645	9,721
Pipeline	2,254	2,792	1,745	251	233	7,275
Conventional (Blended with Fuel Ethanol)	52	165	—	53	9	279
Refinery	—	—	—	51	—	51
Bulk Terminal	52	165	—	2	9	228
Pipeline	—	—	—	—	—	—
Ed55 and Lower	52	165	—	53	—	270
Refinery	—	—	—	51	—	51
Bulk Terminal	52	165	—	2	—	219
Pipeline	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—
Refinery	—	—	—	—	—	—
Bulk Terminal	—	—	—	—	9	9
Pipeline	—	—	—	—	—	—
Conventional (Other)	3,847	6,826	8,388	1,382	2,558	23,001
Refinery	57	1,413	3,530	544	689	6,233
Bulk Terminal	1,536	2,621	3,113	587	1,636	9,493
Pipeline	2,254	2,792	1,745	251	233	7,275
Finished Aviation Gasoline	198	143	426	7	121	895
Refinery	—	59	352	7	32	450
Bulk Terminal	198	84	74	—	89	445
Pipeline	—	—	—	—	—	—
Kerosene-Type Jet Fuel	9,002	7,001	14,276	547	8,993	39,819
Refinery	656	1,862	6,127	279	3,994	12,918
Bulk Terminal	4,248	3,537	3,311	204	4,166	15,466
Pipeline	4,098	1,602	4,838	64	833	11,435
Kerosene	1,884	214	389	1	46	2,534
Refinery	109	144	144	1	1	399
Bulk Terminal	1,751	70	12	—	45	1,878
Pipeline	24	—	233	—	—	257
Distillate Fuel Oil²	37,268	26,823	41,735	3,151	11,133	120,110
Refinery	1,926	5,765	15,002	1,406	5,153	29,252
Bulk Terminal	27,246	14,051	13,795	1,199	4,944	61,235
Pipeline	8,096	7,007	12,938	546	1,036	29,623
15 ppm sulfur and Under	31,737	25,985	33,759	2,826	10,136	104,443
Refinery	1,392	5,293	11,881	1,129	4,544	24,239
Bulk Terminal	22,983	13,898	9,594	1,153	4,612	52,240
Pipeline	7,362	6,794	12,284	544	980	27,964
Greater than 15 ppm to 500 ppm sulfur	1,567	387	1,609	221	262	4,046
Refinery	293	91	871	173	262	1,690
Bulk Terminal	1,265	107	689	46	—	2,107
Pipeline	9	189	49	2	—	249
Greater than 500 ppm sulfur	3,964	451	6,367	104	735	11,621
Refinery	241	381	2,250	104	347	3,323
Bulk Terminal	2,998	46	3,512	—	332	6,888
Pipeline	725	24	605	—	56	1,410
Residual Fuel Oil⁶	7,539	1,176	16,067	209	4,571	29,562
Refinery	841	952	3,454	209	2,185	7,641
Bulk Terminal	6,698	224	12,613	—	2,380	21,915
Pipeline	—	—	—	—	6	6
Less than 0.31% Sulfur	1,757	64	1,406	32	187	3,446
Refinery	318	64	74	32	—	488
Bulk Terminal	1,439	—	1,332	—	187	2,958
0.31% to 1.00% Sulfur	1,563	177	2,035	5	244	4,024
Refinery	82	104	193	5	146	530
Bulk Terminal	1,481	73	1,842	—	98	3,494
Greater than 1.00% Percent Sulfur	4,219	935	12,626	172	4,134	22,086
Refinery	441	784	3,187	172	2,039	6,623
Bulk Terminal	3,778	151	9,439	—	2,095	15,463
Petrochemical Feedstocks	48	539	2,625	—	7	3,219
Refinery	48	539	2,625	—	7	3,219
Naphtha for Petrochemical Feedstock Use	48	438	1,733	—	7	2,226
Other Oils for Petrochemical Feedstock Use	—	101	892	—	—	993
Special Naphthas	40	156	841	—	36	1,073
Refinery	22	95	832	—	36	985
Bulk Terminal	18	61	9	—	—	88
Lubricants	1,254	805	9,679	—	604	12,342
Refinery	730	291	5,994	—	428	7,443
Bulk Terminal	524	514	3,685	—	176	4,899
Waxes	352	68	282	—	—	702
Refinery	352	68	282	—	—	702
Petroleum Coke	—	1,838	5,286	161	1,473	8,758
Refinery	—	1,838	5,286	161	1,473	8,758
Asphalt and Road Oil	4,040	8,422	3,999	1,376	1,778	19,615
Refinery	519	4,057	1,780	826	563	7,745
Bulk Terminal	3,521	4,365	2,219	550	1,215	11,870

Table 55. Stocks of Crude Oil and Petroleum Products by PAD District, October 2019
(Thousand Barrels) — Continued

Commodity	PAD Districts					U.S. Total
	1	2	3	4	5	
Miscellaneous Products	34	99	405	20	66	624
Refinery	34	99	405	20	66	624
Bulk Terminal	—	—	—	—	—	—
Pipeline	—	—	—	—	—	—
Total Stocks, All Oils	156,731	312,647	1,281,859	44,077	138,383	1,933,697

— = No Data Reported.

Lease stocks were excluded from crude oil stocks beginning with data for July 2016 (see explanatory notes).

¹ Crude oil stocks in the Strategic Petroleum Reserve include non-U.S. stocks held under foreign or commercial storage agreements.

² Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

Includes stocks held at fuel ethanol production facilities.

³ Includes stocks held by merchant producers.

⁴ Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

⁵ Renewable diesel fuel includes biodiesel and other renewable diesel.

⁶ Sulfur content not available for stocks held by pipelines.

Note: Stocks are reported as of the last day of the month.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," and EIA-819, "Monthly Oxygenate Report."

Table 56. Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products by PAD District and State, October 2019
(Thousand Barrels)

Commodity	Motor Gasoline			Motor Gasoline Blending Components ¹			Kerosene
	Reformulated	Conventional	Total	Reformulated	Conventional	Total	
PAD District 1	24	1,645	1,669	14,660	30,916	45,576	1,860
Connecticut	—	—	—	1,129	43	1,172	7
Delaware	—	—	—	564	356	920	94
District of Columbia	—	—	—	—	—	—	—
Florida	—	685	685	—	6,910	6,910	—
Georgia	—	276	276	—	2,229	2,229	—
Maine	—	—	—	361	280	641	196
Maryland	—	—	—	1,290	112	1,402	107
Massachusetts	4	—	4	1,766	47	1,813	31
New Hampshire	—	—	—	—	—	—	—
New Jersey	—	70	70	6,018	10,068	16,086	483
New York	20	6	26	693	1,642	2,335	504
North Carolina	—	262	262	—	2,123	2,123	236
Pennsylvania	—	35	35	797	4,399	5,196	145
Rhode Island	—	—	—	576	—	576	—
South Carolina	—	157	157	—	1,281	1,281	20
Vermont	—	52	52	—	—	—	3
Virginia	—	55	55	1,466	1,236	2,702	34
West Virginia	—	47	47	—	190	190	—
PAD District 2	—	4,199	4,199	4,139	27,976	32,115	214
Illinois	—	368	368	2,032	4,139	6,171	145
Indiana	—	261	261	855	3,596	4,451	2
Iowa	—	209	209	—	1,056	1,056	14
Kansas	—	393	393	—	2,736	2,736	16
Kentucky	—	174	174	492	1,101	1,593	2
Michigan	—	190	190	64	2,744	2,808	—
Minnesota	—	348	348	—	2,126	2,126	—
Missouri	—	223	223	192	475	667	—
Nebraska	—	88	88	—	414	414	—
North Dakota	—	87	87	—	934	934	—
Ohio	—	873	873	3	3,227	3,230	21
Oklahoma	—	605	605	—	2,332	2,332	—
South Dakota	—	65	65	—	281	281	—
Tennessee	—	206	206	—	1,785	1,785	—
Wisconsin	—	109	109	501	1,030	1,531	14
PAD District 3	—	6,643	6,643	7,174	51,512	58,686	156
Alabama	—	157	157	—	1,271	1,271	7
Arkansas	—	205	205	11	852	863	—
Louisiana	—	1,888	1,888	263	12,180	12,443	111
Mississippi	—	1,051	1,051	—	2,322	2,322	—
New Mexico	—	23	23	—	635	635	—
Texas	—	3,319	3,319	6,900	34,252	41,152	38
PAD District 4	—	1,184	1,184	—	4,258	4,258	1
Colorado	—	151	151	—	1,024	1,024	—
Idaho	—	286	286	—	68	68	—
Montana	—	311	311	—	1,302	1,302	—
Utah	—	74	74	—	1,234	1,234	1
Wyoming	—	362	362	—	630	630	—
PAD District 5	16	2,334	2,350	10,123	12,085	22,208	46
Alaska	—	834	834	—	—	—	45
Arizona	—	31	31	535	304	839	—
California	16	219	235	9,324	6,040	15,364	1
Hawaii	—	519	519	—	736	736	—
Nevada	—	205	205	1	223	224	—
Oregon	—	32	32	—	1,045	1,045	—
Washington	—	494	494	263	3,737	4,000	—
U.S. Total	40	16,005	16,045	36,096	126,747	162,843	2,277

See footnotes at end of table.

Table 56. Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products by PAD District and State, October 2019
(Thousand Barrels) — Continued

Commodity	Distillate Fuel Oil ¹				Residual Fuel Oil	Propane
	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	Greater than 500 ppm	Total		
PAD District 1	24,375	1,558	3,239	29,172	7,539	7,139
Connecticut	2,683	19	61	2,763	11	—
Delaware	482	24	79	585	450	18
District of Columbia	—	—	—	—	—	—
Florida	2,223	174	—	2,397	621	235
Georgia	922	—	—	922	155	10
Maine	1,120	4	194	1,318	20	—
Maryland	1,463	—	—	1,463	845	4
Massachusetts	1,226	300	143	1,669	28	—
New Hampshire	524	—	—	524	6	457
New Jersey	4,394	331	1,566	6,291	2,629	68
New York	3,367	40	106	3,513	1,902	2,160
North Carolina	793	—	8	801	—	450
Pennsylvania	2,499	267	619	3,385	803	2,798
Rhode Island	858	83	—	941	—	—
South Carolina	650	—	—	650	14	864
Vermont	50	—	12	62	—	—
Virginia	979	260	451	1,690	55	2
West Virginia	142	56	—	198	—	73
PAD District 2	19,191	198	427	19,816	1,176	22,095
Illinois	2,625	—	—	2,625	369	881
Indiana	2,490	—	76	2,566	76	287
Iowa	1,768	—	—	1,768	1	139
Kansas	1,782	—	—	1,782	23	13,826
Kentucky	867	9	—	876	150	302
Michigan	1,162	44	—	1,206	182	5,214
Minnesota	1,354	—	16	1,370	155	365
Missouri	384	54	3	441	—	166
Nebraska	733	—	—	733	—	240
North Dakota	714	1	—	715	27	65
Ohio	1,598	—	102	1,700	103	507
Oklahoma	1,435	82	117	1,634	19	61
South Dakota	576	—	—	576	—	16
Tennessee	842	—	—	842	59	2
Wisconsin	861	8	113	982	12	24
PAD District 3	21,475	1,560	5,762	28,797	16,067	49,626
Alabama	843	8	26	877	365	31
Arkansas	849	—	24	873	—	34
Louisiana	4,992	852	1,736	7,580	7,547	2,655
Mississippi	918	308	156	1,382	46	3,916
New Mexico	235	—	—	235	69	4
Texas	13,638	392	3,820	17,850	8,040	42,986
PAD District 4	2,282	219	104	2,605	209	956
Colorado	532	—	—	532	3	13
Idaho	186	—	—	186	—	—
Montana	789	110	—	899	63	19
Utah	362	44	104	510	62	864
Wyoming	413	65	—	478	81	60
PAD District 5	9,156	262	679	10,097	4,565	2,512
Alaska	1,024	—	82	1,106	317	5
Arizona	520	—	—	520	—	1,578
California	4,369	262	338	4,969	2,749	594
Hawaii	282	—	255	537	686	82
Nevada	283	—	4	287	—	—
Oregon	609	—	—	609	37	—
Washington	2,069	—	—	2,069	776	253
U.S. Total	76,479	3,797	10,211	90,487	29,556	82,328

— = No Data Reported.

¹ Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

Note: Stocks are reported as of the last day of the month.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," and EIA-819, "Monthly Oxygenate Report."

Table 57. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, Barge, and Rail ¹ Between PAD Districts, October 2019
(Thousand Barrels)

Commodity	From 1 to			From 2 to				From 3 to	
	2	3	5	1	3	4	5	1	2
Crude Oil	390	40	0	4,511	62,327	7,126	4,913	2,582	24,072
Petroleum Products	16,607	79	0	20,059	41,395	8,876	5,382	100,821	18,138
Natural Gas Liquids	6,867	54	0	6,426	29,645	5,306	791	1,593	7,996
Ethane	4,978	0	—	0	12,595	751	—	0	731
Propane	1,052	0	0	4,682	9,445	2,502	361	1,566	961
Normal Butane	158	0	0	1,656	3,880	1,075	252	21	374
Isobutane	394	54	0	88	1,328	392	178	6	846
Natural Gasoline	285	0	—	0	2,397	586	—	0	5,084
Refinery Olefins	0	0	—	112	282	—	—	0	0
Ethylene	—	—	—	—	—	—	—	—	—
Propylene	0	0	—	112	282	—	—	0	0
Normal Butylene	—	—	—	—	—	—	—	—	—
Isobutylene	—	—	—	—	—	—	—	—	—
Unfinished Oils	0	0	—	—	1,295	—	—	—	141
Motor Gasoline Blending Components	6,377	0	0	1,233	1,655	1,547	0	57,105	5,009
Reformulated - RBOB	0	0	0	0	115	—	0	8,602	1,460
Conventional	6,377	0	0	1,233	1,540	1,547	0	48,503	3,549
CBOB	6,377	0	0	1,233	1,381	1,547	0	48,503	3,013
GTAB	—	—	—	—	—	—	—	—	—
Other	0	0	—	—	159	—	—	—	536
Renewable Fuels	0	0	0	8,973	5,716	346	4,418	327	0
Fuel Ethanol	0	0	0	8,817	5,555	346	4,189	327	0
Renewable Diesel Fuel ²	0	0	0	157	161	0	229	0	0
Other Renewable Fuels	—	—	—	—	—	—	—	—	—
Finished Motor Gasoline	105	0	0	582	287	201	0	2,491	813
Reformulated	—	—	—	—	—	—	—	—	—
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—	—	—	—
Reformulated Other	—	—	—	—	—	—	—	—	—
Conventional	105	0	0	582	287	201	0	2,491	813
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—	—	—	—
Ed55 and Lower	—	—	—	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—	—	—	—
Conventional Other	105	0	0	582	287	201	0	2,491	813
Finished Aviation Gasoline	0	0	—	0	0	—	—	117	20
Kerosene-Type Jet Fuel	276	0	0	78	50	687	0	16,064	1,583
Kerosene	—	0	—	0	0	—	—	117	—
Distillate Fuel Oil	2,982	0	0	1,215	1,070	789	0	21,982	2,131
15 ppm sulfur and under	2,982	0	0	1,215	1,070	789	0	20,936	2,051
Greater than 15 ppm to 500 ppm sulfur	0	0	—	0	0	—	—	4	80
Greater than 500 ppm sulfur	—	0	—	0	0	—	—	1,042	—
Residual Fuel Oil	0	0	—	—	458	—	—	—	0
Petrochemical Feedstocks	0	0	—	—	97	—	—	—	0
Naphtha for Petrochemical Feedstock Use	0	0	—	—	97	—	—	—	0
Other Oils for Petrochemical Feedstock Use	—	—	—	—	—	—	—	—	—
Special Naphthas	0	0	—	—	0	—	—	—	13
Lubricants	0	0	—	10	0	—	—	446	195
Waxes	—	—	—	—	—	—	—	—	—
Marketable Petroleum Coke	0	25	0	701	726	0	47	55	0
Asphalt and Road Oil	0	0	0	729	114	0	127	524	231
Miscellaneous Products	0	0	—	—	0	—	—	—	6
Total	16,997	119	0	24,570	103,722	16,002	10,295	103,403	42,210

See footnotes at end of table.

Table 57. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, Barge, and Rail ¹ Between PAD Districts, October 2019
(Thousand Barrels) — Continued

Commodity	From 3 to		From 4 to				From 5 to		
	4	5	1	2	3	5	1	3	4
Crude Oil	0	863	0	27,789	483	0	0	0	0
Petroleum Products	0	5,220	0	12,867	4,048	2,282	0	0	25
Natural Gas Liquids	0	100	0	11,686	3,600	206	0	0	0
Ethane	0	—	0	2,339	1,259	—	0	0	0
Propane	0	0	0	4,874	1,074	172	0	0	0
Normal Butane	0	81	0	2,070	369	30	0	0	0
Isobutane	0	19	0	847	308	4	0	0	0
Natural Gasoline	0	—	0	1,556	590	—	0	0	0
Refinery Olefins	—	—	0	0	0	—	0	0	—
Ethylene	—	—	—	—	—	—	—	—	—
Propylene	—	—	0	0	0	—	0	0	—
Normal Butylene	—	—	—	—	—	—	—	—	—
Isobutylene	—	—	—	—	—	—	—	—	—
Unfinished Oils	—	—	—	0	0	—	—	0	—
Motor Gasoline Blending Components	0	3,721	0	218	0	1,085	0	0	0
Reformulated - RBOB	—	2,254	0	0	0	0	0	0	—
Conventional	0	1,467	0	218	0	1,085	0	0	0
CBOB	0	1,467	0	218	0	1,085	0	0	0
GTAB	—	—	—	—	—	—	—	—	—
Other	—	—	—	0	0	—	—	0	—
Renewable Fuels	0	397	0	0	0	0	0	0	25
Fuel Ethanol	0	198	0	0	0	0	0	0	0
Renewable Diesel Fuel ²	0	199	0	0	0	0	0	0	25
Other Renewable Fuels	—	—	—	—	—	—	—	—	—
Finished Motor Gasoline	0	0	0	402	0	333	0	0	0
Reformulated	—	—	—	—	—	—	—	—	—
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—	—	—	—
Reformulated Other	—	—	—	—	—	—	—	—	—
Conventional	0	0	0	402	0	333	0	0	0
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—	—	—	—
Ed55 and Lower	—	—	—	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—	—	—	—
Conventional Other	0	0	0	402	0	333	0	0	0
Finished Aviation Gasoline	—	—	0	0	0	—	0	0	—
Kerosene-Type Jet Fuel	0	247	0	33	0	10	0	0	0
Kerosene	—	—	0	—	0	—	0	0	—
Distillate Fuel Oil	0	638	0	242	0	337	0	0	0
15 ppm sulfur and under	0	638	0	242	0	337	0	0	0
Greater than 15 ppm to 500 ppm sulfur	—	—	0	0	0	—	0	0	—
Greater than 500 ppm sulfur	—	—	0	—	0	—	0	0	—
Residual Fuel Oil	—	—	—	0	0	—	—	0	—
Petrochemical Feedstocks	—	—	—	0	0	—	—	0	—
Naphtha for Petrochemical Feedstock Use	—	—	—	0	0	—	—	0	—
Other Oils for Petrochemical Feedstock Use	—	—	—	—	—	—	—	—	—
Special Naphthas	—	—	—	0	0	—	—	0	—
Lubricants	—	—	0	0	0	—	0	0	—
Waxes	—	—	—	—	—	—	—	—	—
Marketable Petroleum Coke	0	0	0	110	356	89	0	0	0
Asphalt and Road Oil	0	117	0	176	93	222	0	0	0
Miscellaneous Products	—	—	—	0	0	—	—	0	—
Total	0	6,083	0	40,656	4,532	2,282	0	0	25

— = No Data Reported.

¹ Movements of crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil include movements by rail. Movements of other products are by pipeline, tanker and barge only.

² Renewable diesel fuel includes biodiesel and other renewable diesel.

Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-817, "Monthly Tanker and Barge Movements Report." Rail net movements estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 58. Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts, October 2019
(Thousand Barrels)

Commodity	From 1 to		From 2 to			From 3 to			
	2	3	1	3	4	1	2	4	5
Crude Oil	175	40	212	57,334	7,126	130	24,072	0	-
Petroleum Products	16,413	0	6,595	31,288	8,530	77,993	16,292	0	4,606
Natural Gas Liquids	6,673	0	4,713	28,678	5,306	1,257	7,755	0	-
Ethane	4,978	0	0	12,595	751	0	731	0	-
Propane	966	0	3,763	8,855	2,502	1,257	898	0	-
Normal Butane	130	0	950	3,676	1,075	0	288	0	-
Isobutane	314	0	0	1,155	392	0	754	0	-
Natural Gasoline	285	0	0	2,397	586	0	5,084	0	-
Motor Gasoline Blending Components	6,377	0	621	1,402	1,547	43,485	4,756	0	3,721
Reformulated - RBOB	0	0	0	115	-	8,602	1,460	-	2,254
Conventional	6,377	0	621	1,287	1,547	34,883	3,296	0	1,467
CBOB	6,377	0	621	1,287	1,547	34,883	3,013	0	1,467
GTAB	-	-	-	-	-	-	-	-	-
Other	0	0	-	0	-	-	283	-	-
Renewable Fuels	-	-	-	-	-	-	-	-	-
Fuel Ethanol	-	-	-	-	-	-	-	-	-
Renewable Diesel Fuel ¹	-	-	-	-	-	-	-	-	-
Other Renewable Fuels	-	-	-	-	-	-	-	-	-
Finished Motor Gasoline	105	0	527	144	201	1,347	736	0	0
Reformulated	-	-	-	-	-	-	-	-	-
Reformulated Blended with Fuel Ethanol	-	-	-	-	-	-	-	-	-
Reformulated Other	-	-	-	-	-	-	-	-	-
Conventional	105	0	527	144	201	1,347	736	0	0
Conventional Blended with Fuel Ethanol	-	-	-	-	-	-	-	-	-
Ed55 and Lower	-	-	-	-	-	-	-	-	-
Greater than Ed55	-	-	-	-	-	-	-	-	-
Conventional Other	105	0	527	144	201	1,347	736	0	0
Finished Aviation Gasoline	-	-	-	-	-	-	-	-	-
Kerosene-Type Jet Fuel	276	0	78	50	687	13,575	1,256	0	247
Kerosene	-	0	0	0	-	117	-	-	-
Distillate Fuel Oil	2,982	0	656	1,014	789	18,212	1,789	0	638
15 ppm sulfur and under	2,982	0	656	1,014	789	17,166	1,709	0	638
Greater than 15 ppm to 500 ppm sulfur	0	0	0	0	-	4	80	-	-
Greater than 500 ppm sulfur	-	0	0	0	-	1,042	-	-	-
Residual Fuel Oil	-	-	-	-	-	-	-	-	-
Miscellaneous Products	-	-	-	-	-	-	-	-	-
Total	16,588	40	6,807	88,622	15,656	78,123	40,364	0	4,606

See footnotes at end of table.

Table 58. Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts, October 2019
(Thousand Barrels) — Continued

Commodity	From 4 to				From 5 to	
	1	2	3	5	3	4
Crude Oil	0	27,789	352	—	0	0
Petroleum Products	0	12,581	3,600	1,765	0	0
Natural Gas Liquids	0	11,686	3,600	—	0	0
Ethane	0	2,339	1,259	—	0	0
Propane	0	4,874	1,074	—	0	0
Normal Butane	0	2,070	369	—	0	0
Isobutane	0	847	308	—	0	0
Natural Gasoline	0	1,556	590	—	0	0
Motor Gasoline Blending Components	0	218	0	1,085	0	0
Reformulated - RBOB	0	0	0	0	0	—
Conventional	0	218	0	1,085	0	0
CBOB	0	218	0	1,085	0	0
GTAB	—	—	—	—	—	—
Other	—	0	0	—	0	—
Renewable Fuels	—	—	—	—	—	—
Fuel Ethanol	—	—	—	—	—	—
Renewable Diesel Fuel ¹	—	—	—	—	—	—
Other Renewable Fuels	—	—	—	—	—	—
Finished Motor Gasoline	0	402	0	333	0	0
Reformulated	—	—	—	—	—	—
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—
Reformulated Other	—	—	—	—	—	—
Conventional	0	402	0	333	0	0
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—
Ed55 and Lower	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—
Conventional Other	0	402	0	333	0	0
Finished Aviation Gasoline	—	—	—	—	—	—
Kerosene-Type Jet Fuel	0	33	0	10	0	0
Kerosene	0	—	0	—	0	—
Distillate Fuel Oil	0	242	0	337	0	0
15 ppm sulfur and under	0	242	0	337	0	0
Greater than 15 ppm to 500 ppm sulfur	0	0	0	—	0	—
Greater than 500 ppm sulfur	0	—	0	—	0	—
Residual Fuel Oil	—	—	—	—	—	—
Miscellaneous Products	—	—	—	—	—	—
Total	0	40,370	3,952	1,765	0	0

— = No Data Reported.

¹ Renewable diesel fuel includes biodiesel and other renewable diesel.

Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report."

Table 59. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, October 2019
(Thousand Barrels)

Commodity	From 1 to			From 2 to		
	2	3	5	1	3	5
Crude Oil	215	0	0	267	2,707	0
Petroleum Products	0	0	0	1,734	2,734	0
Natural Gas Liquids	—	0	—	0	0	—
Ethane	—	—	—	—	—	—
Propane	—	0	—	0	0	—
Normal Butane	—	—	—	—	—	—
Isobutane	—	—	—	—	—	—
Natural Gasoline	—	—	—	—	—	—
Unfinished Oils	0	0	—	—	1,295	—
Motor Gasoline Blending Components	0	0	—	612	253	—
Reformulated - RBOB	—	—	—	—	—	—
Conventional	0	0	—	612	253	—
CBOB	0	0	—	612	94	—
GTAB	—	—	—	—	—	—
Other	0	0	—	—	159	—
Renewable Fuels	0	0	0	342	415	0
Fuel Ethanol	0	0	—	342	393	—
Renewable Diesel Fuel ¹	0	0	0	—	22	0
Other Renewable Fuels	—	—	—	—	—	—
Finished Motor Gasoline	0	0	—	55	143	—
Reformulated	—	—	—	—	—	—
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—
Reformulated Other	—	—	—	—	—	—
Conventional	0	0	—	55	143	—
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—
Ed55 and Lower	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—
Conventional Other	0	0	—	55	143	—
Finished Aviation Gasoline	0	0	—	0	0	—
Kerosene-Type Jet Fuel	0	0	—	0	0	—
Kerosene	—	—	—	—	—	—
Distillate Fuel Oil	0	0	—	559	56	—
15 ppm sulfur and under	0	0	—	559	56	—
Greater than 15 ppm to 500 ppm sulfur	—	—	—	—	—	—
Greater than 500 ppm sulfur	—	—	—	—	—	—
Residual Fuel Oil	0	0	—	—	458	—
Less than 0.31 percent sulfur	0	0	—	—	34	—
0.31 to 1.00 percent sulfur	—	—	—	—	—	—
Greater than 1.00 percent sulfur	0	0	—	—	424	—
Petrochemical Feedstocks	0	0	—	—	97	—
Naphtha for Petrochemical Feedstock Use	0	0	—	—	97	—
Other Oils for Petrochemical Feedstock Use	—	—	—	—	—	—
Special Naphthas	0	0	—	—	0	—
Lubricants	0	0	—	10	0	—
Waxes	—	—	—	—	—	—
Marketable Petroleum Coke	—	—	—	—	—	—
Asphalt and Road Oil	0	0	—	156	17	—
Miscellaneous Products	0	0	—	—	0	—
Total	215	0	0	2,001	5,441	0

See footnotes at end of table.

Table 59. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, October 2019
(Thousand Barrels) — Continued

Commodity	From 3 to						From 5 to		
	1	New England	Central Atlantic	Lower Atlantic	2	5	1	2	3
Crude Oil	2,452	—	2,452	—	0	531	0	0	0
Petroleum Products	22,234	20	258	21,956	1,546	95	0	0	0
Natural Gas Liquids	28	—	—	28	—	—	0	—	0
Ethane	—	—	—	—	—	—	—	—	—
Propane	28	—	—	28	—	—	0	—	0
Normal Butane	—	—	—	—	—	—	—	—	—
Isobutane	—	—	—	—	—	—	—	—	—
Natural Gasoline	—	—	—	—	—	—	—	—	—
Unfinished Oils	—	—	—	—	141	—	—	0	0
Motor Gasoline Blending Components	13,620	—	—	13,620	253	—	0	0	0
Reformulated - RBOB	—	—	—	—	—	—	—	—	—
Conventional	13,620	—	—	13,620	253	—	0	0	0
CBOB	13,620	—	—	13,620	0	—	0	0	0
GTAB	—	—	—	—	—	—	—	—	—
Other	—	—	—	—	253	—	—	0	0
Renewable Fuels	327	—	—	327	0	95	0	0	0
Fuel Ethanol	327	—	—	327	0	—	0	0	0
Renewable Diesel Fuel ¹	—	—	—	—	0	95	—	0	0
Other Renewable Fuels	—	—	—	—	—	—	—	—	—
Finished Motor Gasoline	1,144	—	—	1,144	77	—	0	0	0
Reformulated	—	—	—	—	—	—	—	—	—
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—	—	—	—
Reformulated Other	—	—	—	—	—	—	—	—	—
Conventional	1,144	—	—	1,144	77	—	0	0	0
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—	—	—	—
Ed55 and Lower	—	—	—	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—	—	—	—
Conventional Other	1,144	—	—	1,144	77	—	0	0	0
Finished Aviation Gasoline	117	20	—	97	20	—	0	0	0
Kerosene-Type Jet Fuel	2,489	—	—	2,489	327	—	0	0	0
Kerosene	—	—	—	—	—	—	—	—	—
Distillate Fuel Oil	3,770	—	—	3,770	342	—	0	0	0
15 ppm sulfur and under	3,770	—	—	3,770	342	—	0	0	0
Greater than 15 ppm to 500 ppm sulfur	—	—	—	—	—	—	—	—	—
Greater than 500 ppm sulfur	—	—	—	—	—	—	—	—	—
Residual Fuel Oil	—	—	—	—	0	—	—	0	0
Less than 0.31 percent sulfur	—	—	—	—	0	—	—	0	0
0.31 to 1.00 percent sulfur	—	—	—	—	—	—	—	—	—
Greater than 1.00 percent sulfur	—	—	—	—	0	—	—	0	0
Petrochemical Feedstocks	—	—	—	—	0	—	—	0	0
Naphtha for Petrochemical Feedstock Use	—	—	—	—	0	—	—	0	0
Other Oils for Petrochemical Feedstock Use	—	—	—	—	—	—	—	—	—
Special Naphthas	—	—	—	—	13	—	—	0	0
Lubricants	446	—	237	209	195	—	0	0	0
Waxes	—	—	—	—	—	—	—	—	—
Marketable Petroleum Coke	—	—	—	—	—	—	—	—	—
Asphalt and Road Oil	293	—	21	272	172	—	0	0	0
Miscellaneous Products	—	—	—	—	6	—	—	0	0
Total	24,686	20	2,710	21,956	1,546	626	0	0	0

— = No Data Reported.

¹ Renewable diesel fuel includes biodiesel and other renewable diesel.

Sources: Energy Information Administration (EIA) Form EIA-817, "Monthly Tanker and Barge Movements Report."

Table 60. Movements of Crude Oil and Selected Products by Rail Between PAD Districts, October 2019
(Thousand Barrels)

Commodity	From 1 to				From 2 to			
	2	3	4	5	1	3	4	5
Crude Oil	0	0	0	0	4,032	2,286	0	4,913
Propane	86	0	0	0	919	590	0	361
Propylene	0	0	–	–	112	282	–	–
Normal Butane	28	0	0	0	706	204	0	252
Isobutane	80	54	0	0	88	173	0	178
Fuel Ethanol	0	0	0	0	8,475	5,162	346	4,189
Biodiesel	0	0	0	0	157	139	0	229
Marketable Petroleum Coke	0	25	0	0	701	726	0	47
Asphalt and Road Oil	0	0	0	0	573	97	0	127

Commodity	From 3 to				From 4 to			
	1	2	4	5	1	2	3	5
Crude Oil	0	0	0	332	0	0	131	0
Propane	281	63	0	0	0	0	0	172
Propylene	0	0	–	–	0	0	0	–
Normal Butane	21	86	0	81	0	0	0	30
Isobutane	6	92	0	19	0	0	0	4
Fuel Ethanol	0	0	0	198	0	0	0	0
Biodiesel	0	0	0	104	0	0	0	0
Marketable Petroleum Coke	55	0	0	0	0	110	356	89
Asphalt and Road Oil	231	59	0	117	0	176	93	222

Commodity	From 5 to			
	1	2	3	4
Crude Oil	0	0	0	0
Propane	0	0	0	0
Propylene	0	0	0	–
Normal Butane	0	0	0	0
Isobutane	0	0	0	0
Fuel Ethanol	0	0	0	0
Biodiesel	0	0	0	25
Marketable Petroleum Coke	0	25	0	0
Asphalt and Road Oil	0	0	0	0

– = No Data Reported.

Source: Rail Movements are estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 61. Movements of Crude Oil by Pipeline, Tanker, Barge and Rail between PAD Districts, October 2019
(Thousand Barrels)

PADD	Pipeline	Tanker and Barge	Rail	Total
From 1 to				
2	175	215	0	390
3	40	0	0	40
4	0	—	0	0
5	—	0	0	0
From 2 to				
1	212	267	4,032	4,511
3	57,334	2,707	2,286	62,327
4	7,126	—	0	7,126
5	—	0	4,913	4,913
From 3 to				
1	130	2,452	0	2,582
2	24,072	0	0	24,072
4	0	—	0	0
5	—	531	332	863
From 4 to				
1	0	0	0	0
2	27,789	0	0	27,789
3	352	0	131	483
5	—	0	0	0
From 5 to				
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	—	0	0

— = No Data Reported.

Sources: Energy Information Administration (EIA) Forms EIA-813, "Monthly Crude Oil Report," EIA-817, "Monthly Tanker and Barge Movements Report." Rail movements estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 62. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, Barge and Rail ¹ Between PAD Districts, October 2019
(Thousand Barrels)

Commodity	PAD District 1			PAD District 2			PAD District 3		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	7,093	430	6,663	52,251	78,877	-26,626	62,850	27,517	35,334
Petroleum Products	120,880	16,686	104,194	47,637	75,713	-28,076	45,523	124,179	-78,656
Natural Gas Liquids	8,019	6,921	1,098	26,549	42,168	-15,619	33,299	9,689	23,610
Ethane	0	4,978	-4,978	8,048	13,346	-5,298	13,854	731	13,123
Propane	6,248	1,052	5,196	6,887	16,990	-10,103	10,519	2,527	7,992
Normal Butane	1,677	158	1,519	2,602	6,863	-4,261	4,249	476	3,773
Isobutane	94	448	-354	2,087	1,986	101	1,690	871	819
Natural Gasoline	0	285	-285	6,925	2,983	3,942	2,987	5,084	-2,097
Refinery Olefins	112	0	112	0	394	-394	282	0	282
Ethylene	0	0	-	-	-	-	0	0	-
Propylene	112	0	112	0	394	-394	282	0	282
Normal Butylene	0	0	-	0	0	-	0	0	-
Isobutylene	0	0	-	0	0	-	0	0	-
Unfinished Oils	0	0	-	141	1,295	-1,154	1,295	141	1,154
Motor Gasoline Blending Components	58,338	6,377	51,961	11,604	4,435	7,169	1,655	65,835	-64,180
Reformulated - RBOB	8,602	0	8,602	1,460	115	1,345	115	12,316	-12,201
Conventional	49,736	6,377	43,359	10,144	4,320	5,824	1,540	53,519	-51,979
CBOB	49,736	6,377	43,359	9,608	4,161	5,447	1,381	52,983	-51,602
GTAB	0	0	-	-	-	-	-	-	-
Other	0	0	-	536	159	377	159	536	-377
Renewable Fuels	9,300	0	9,300	0	19,453	-19,453	5,716	724	4,992
Fuel Ethanol	9,144	0	9,144	0	18,907	-18,907	5,555	525	5,030
Renewable Diesel Fuel ²	157	0	157	0	546	-546	161	199	-38
Other Renewable Fuels	-	-	-	-	-	-	0	0	-
Finished Motor Gasoline	3,073	105	2,968	1,320	1,070	250	287	3,304	-3,017
Reformulated	0	0	-	0	0	-	0	0	-
Reformulated Blended with Fuel Ethanol	0	0	-	0	0	-	0	0	-
Reformulated Other	-	-	-	-	-	-	-	-	-
Conventional	3,073	105	2,968	1,320	1,070	250	287	3,304	-3,017
Conventional Blended with Fuel Ethanol	0	0	-	0	0	-	0	0	-
Ed55 and Lower	0	0	-	0	0	-	0	0	-
Greater than Ed55	0	0	-	0	0	-	0	0	-
Conventional Other	3,073	105	2,968	1,320	1,070	250	287	3,304	-3,017
Finished Aviation Gasoline	117	0	117	20	0	20	0	137	-137
Kerosene-Type Jet Fuel	16,142	276	15,866	1,892	815	1,077	50	17,894	-17,844
Kerosene	117	0	117	0	0	-	0	117	-117
Distillate Fuel Oil	23,197	2,982	20,215	5,355	3,074	2,281	1,070	24,751	-23,681
15 ppm sulfur and under	22,151	2,982	19,169	5,275	3,074	2,201	1,070	23,625	-22,555
Greater than 15 ppm to 500 ppm sulfur	4	0	4	80	0	80	0	84	-84
Greater than 500 ppm sulfur	1,042	0	1,042	0	0	-	0	1,042	-1,042
Residual Fuel Oil	0	0	-	0	458	-458	458	0	458
Petrochemical Feedstocks	0	0	-	0	97	-97	97	0	97
Naphtha for Petrochemical Feedstock Use	0	0	-	0	97	-97	97	0	97
Other Oils for Petrochemical Feedstock Use	-	-	-	0	0	-	0	0	-
Special Naphthas	0	0	-	13	0	13	0	13	-13
Lubricants	456	0	456	195	10	185	0	641	-641
Waxes	0	0	-	0	0	-	0	0	-
Marketable Petroleum Coke	756	25	731	135	1,474	-1,339	1,106	55	1,051
Asphalt and Road Oil	1,253	0	1,253	407	970	-563	207	872	-665
Miscellaneous Products	0	0	-	6	0	6	0	6	-6
Total	127,973	17,116	110,857	99,888	154,589	-54,701	108,373	151,696	-43,323

See footnotes at end of table.

Table 62. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, Barge and Rail ¹ Between PAD Districts, October 2019
(Thousand Barrels) — Continued

Commodity	PAD District 4			PAD District 5		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	7,126	28,272	-21,146	5,775	0	5,775
Petroleum Products	8,901	19,198	-10,296	12,884	50	12,834
Natural Gas Liquids	5,306	15,492	-10,186	1,097	0	1,097
Ethane	751	3,598	-2,847	0	0	—
Propane	2,502	6,120	-3,618	533	0	533
Normal Butane	1,075	2,469	-1,394	363	0	363
Isobutane	392	1,159	-767	201	0	201
Natural Gasoline	586	2,146	-1,560	0	0	—
Refinery Olefins	0	0	—	0	0	—
Ethylene	—	—	—	—	—	—
Propylene	0	0	—	0	0	—
Normal Butylene	0	0	—	0	0	—
Isobutylene	0	0	—	0	0	—
Unfinished Oils	0	0	—	0	0	—
Motor Gasoline Blending Components	1,547	1,303	244	4,806	0	4,806
Reformulated - RBOB	—	—	—	2,254	0	2,254
Conventional	1,547	1,303	244	2,552	0	2,552
CBOB	1,547	1,303	244	2,552	0	2,552
GTAB	—	—	—	—	—	—
Other	0	0	—	0	0	—
Renewable Fuels	371	0	371	4,814	25	4,790
Fuel Ethanol	346	0	346	4,387	0	4,387
Renewable Diesel Fuel ²	25	0	25	427	25	403
Other Renewable Fuels	—	—	—	0	0	—
Finished Motor Gasoline	201	735	-534	333	0	333
Reformulated	—	—	—	0	0	—
Reformulated Blended with Fuel Ethanol	—	—	—	0	0	—
Reformulated Other	—	—	—	—	—	—
Conventional	201	735	-534	333	0	333
Conventional Blended with Fuel Ethanol	0	0	—	0	0	—
Ed55 and Lower	0	0	—	0	0	—
Greater than Ed55	0	0	—	0	0	—
Conventional Other	201	735	-534	333	0	333
Finished Aviation Gasoline	0	0	—	0	0	—
Kerosene-Type Jet Fuel	687	43	644	257	0	257
Kerosene	0	0	—	0	0	—
Distillate Fuel Oil	789	579	210	975	0	975
15 ppm sulfur and under	789	579	210	975	0	975
Greater than 15 ppm to 500 ppm sulfur	0	0	—	0	0	—
Greater than 500 ppm sulfur	0	0	—	0	0	—
Residual Fuel Oil	0	0	—	0	0	—
Petrochemical Feedstocks	—	—	—	0	0	—
Naphtha for Petrochemical Feedstock Use	—	—	—	0	0	—
Other Oils for Petrochemical Feedstock Use	—	—	—	—	—	—
Special Naphthas	—	—	—	0	0	—
Lubricants	0	0	—	0	0	—
Waxes	0	0	—	0	0	—
Marketable Petroleum Coke	0	554	-554	136	25	111
Asphalt and Road Oil	0	491	-491	466	0	466
Miscellaneous Products	0	0	—	0	0	—
Total	16,027	47,470	-31,443	18,660	50	18,610

— = No Data Reported.

¹ Movements of crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil include movements by rail. Movements of other products are by pipeline, tanker and barge only.

² Renewable diesel fuel includes biodiesel and other renewable diesel.

Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-817, "Monthly Tanker and Barge Movements Report." Rail net movements estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Appendix A

District Descriptions and Maps

The following are the Refining Districts which make up the Petroleum Administration for Defense (PAD) Districts.

PAD District I

East Coast: The District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung, and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

Appalachian No. 1: The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

Sub-PAD District I

New England: The States of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

Central Atlantic: The District of Columbia and the States of Delaware, Maryland, New Jersey, New York, and Pennsylvania.

Lower Atlantic: The States of Florida, Georgia, North Carolina, South Carolina, Virginia and West Virginia.

PAD District II

Indiana-Illinois-Kentucky: The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and Ohio.

Minnesota-Wisconsin-North and South Dakota: The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

Oklahoma-Kansas-Missouri: The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

PAD District III

Texas Inland: The State of Texas except the Texas Gulf Coast District.

Texas Gulf Coast: The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

Louisiana Gulf Coast: The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

North Louisiana-Arkansas: The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

New Mexico: The State of New Mexico.

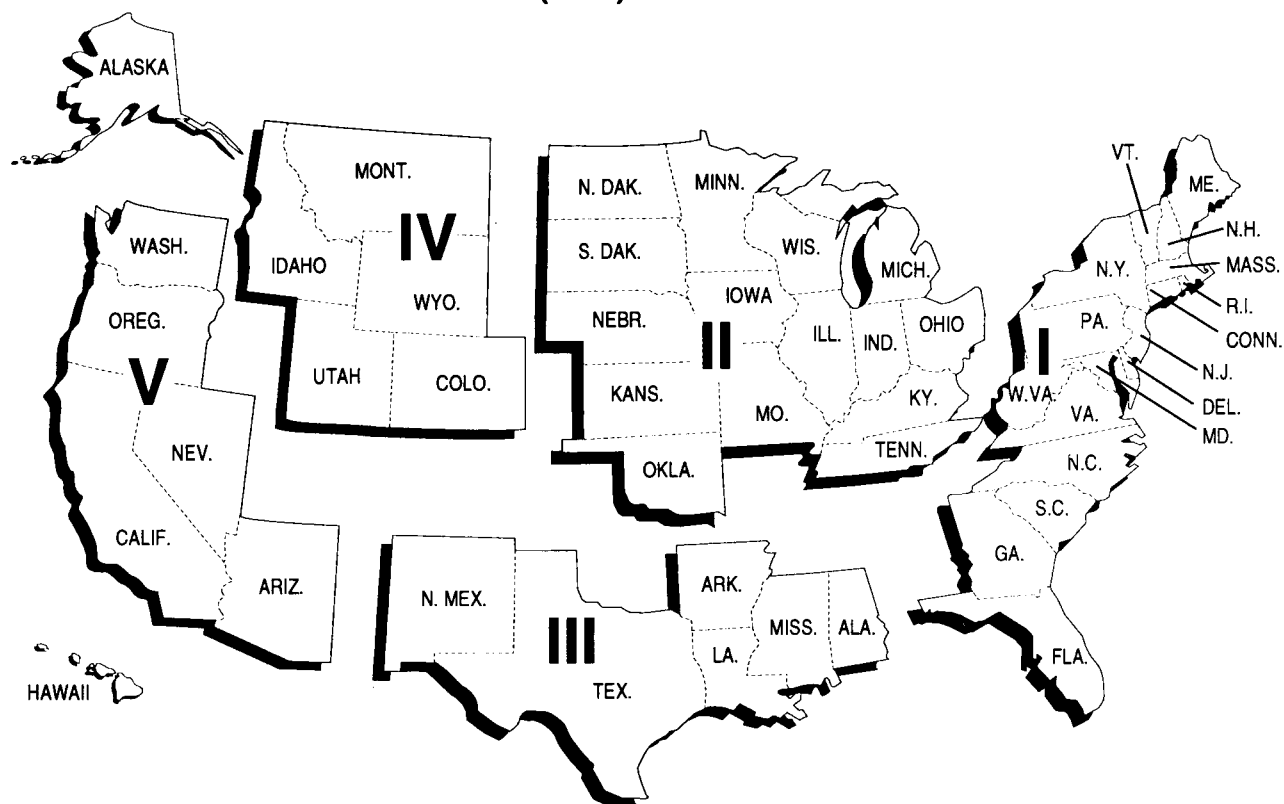
PAD District IV

Rocky Mountain: The States of Montana, Idaho, Wyoming, Utah, and Colorado.

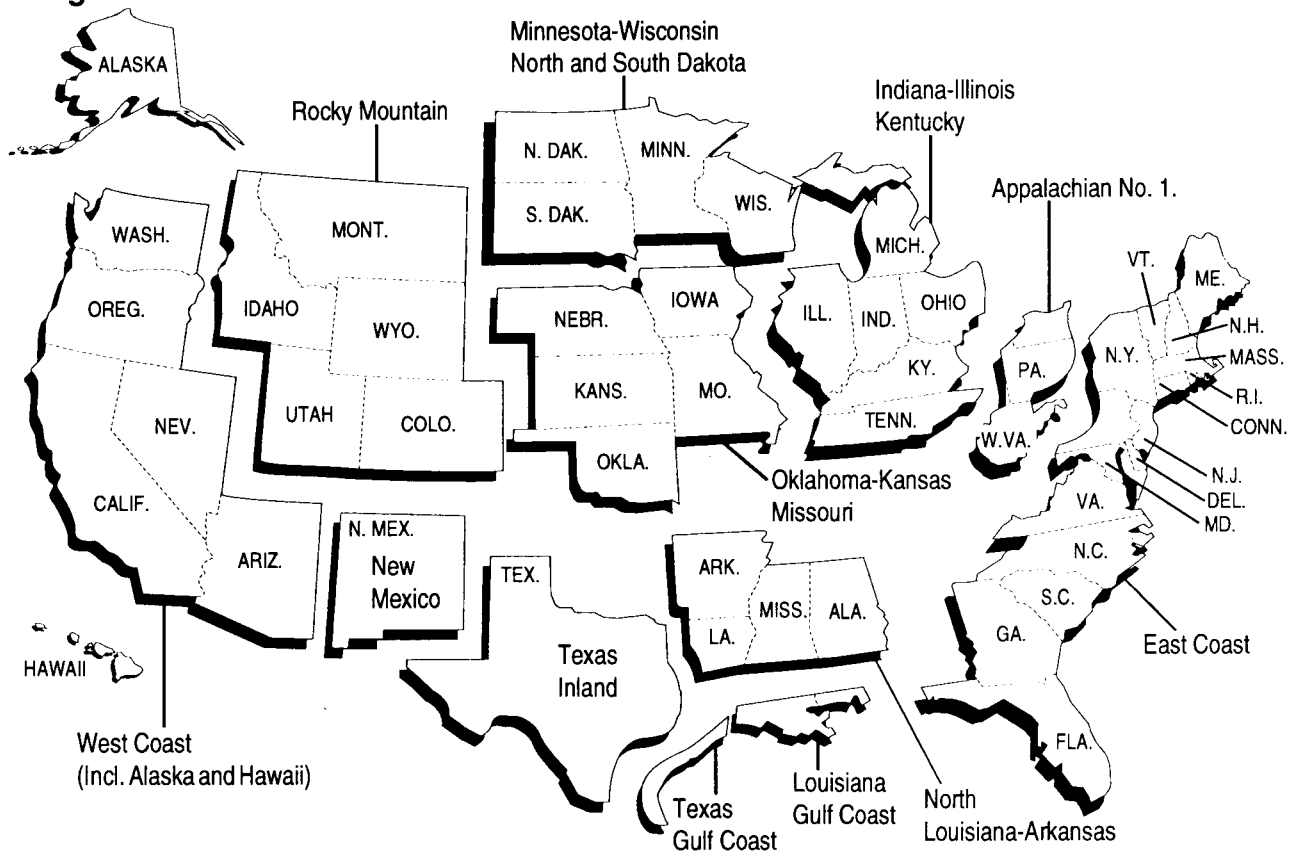
PAD District V

West Coast: The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

Petroleum Administration for Defense (PAD) Districts



Refining Districts



PSM Explanatory Notes

Preface

The *Petroleum Supply Monthly (PSM)* is the monthly component of a series of three publications concerning the supply and disposition of crude oil and petroleum products produced by the Petroleum Division of the Energy Information Administration (EIA). The other two components are the *Weekly Petroleum Status Report (WPSR)* and the *Petroleum Supply Annual (PSA)*. Together these publications present a comprehensive snapshot of petroleum supply data on a weekly, monthly and yearly basis.

Data presented in the PSM describe the supply and disposition of petroleum products in the United States and major U.S. geographic regions. The data series describe production, imports and exports, inter-Petroleum Administration for Defense (PAD) District movements, and inventories by the primary suppliers of petroleum products in the United States (50 States and the District of Columbia). The reporting universe includes those petroleum sectors in primary supply: petroleum refiners, motor gasoline blenders, operators of natural gas processing plants and fractionators, inter-PAD District transporters, importers, and major inventory holders of petroleum products and crude oil. When aggregated, the data reported by these sectors approximately represent the consumption of petroleum products in the United States.

The PSM tables present statistics for the most current month available as well as year-to-date. In most cases, the statistics are presented for several geographic areas - the United States (50 States and the District of Columbia), five PAD Districts, and 12 Refining Districts. At the U.S. and PAD District level, the total volume and the daily rate of activities are presented. The statistics are developed from monthly survey forms submitted by respondents to the EIA and from data provided from other sources.

Final statistics for the data series published in the *PSM* are published in the *PSA*. The *PSA* is published approximately five months after the end of the report year.

Appendix B. Explanatory Notes

1. Overview

A. The Energy Information Administration's Quality Guidelines

The data contained in the *Petroleum Supply Monthly (PSM)* are subject to separate information quality guidelines issued by the Office of Management and Budget (OMB), the Department of Energy (DOE), and Energy Information Administration (EIA). With available resources, EIA continually works to improve its systems in order to provide high quality information needed by public and private policymakers and decision makers. EIA has performance standards to ensure the quality (i.e., objectivity, utility, and integrity) of information it disseminates to the public. Quality is ensured and maximized at levels appropriate to the nature and timeliness of the disseminated information.

B. Concepts of Product Supply and Demand

Petroleum supply estimates contained in the PSM are often interpreted as an approximation of petroleum demand measured as product supplied. Product supplied is often called “implied” demand because it is a measure of demand that is implied by disappearance of petroleum products from facilities and activities in the “primary” supply chain. Facilities and activities in the primary supply chain include refineries and blending terminals, gas processing plants and fractionators, oxygenate producers, biodiesel producers, imports, exports, bulk storage terminals, and pipelines. Total product supplied in the PSM at the U.S. level is equal to the sum of field production, plus refinery and blender net production, plus renewable fuels, and oxygenate plant net production, plus imports, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports. Net receipts are added as a component of supply at the PAD District level. Crude oil product supplied is normally zero because crude oil is processed in refineries and rarely, if ever, used directly.

The secondary system is that portion of the overall distribution network that falls between producers and end-users. Product typically flows in bulk from the primary supply system into the secondary system before delivery in small quantities to consumers (the tertiary system). The secondary system includes storage at bulk plants; at retail motor fuel outlets, such as service stations, truck stops, and convenience stores; and at retail fuel oil dealers. Bulk plants are wholesale storage facilities that have less than 50,000 barrels of storage capacity and, by definition, receive product only by tank car or truck, not by barge, tanker, or pipeline. Tertiary inventories are held by end users and include fuel in vehicle tanks, heating oil in residential tanks, fuel oil held by utilities, jet fuel stored in facilities operated by end users, and certain proprietary storage of raw materials (e.g. propane) for the chemical industry.

Data users sometimes consider demand as sales to the ultimate consumer or as the actual consumption of the product. Since there may be time delays between the movement of product into the primary market and its ultimate purchase or consumption, these definitions of demand require data on changes in secondary and/or tertiary stocks or the assumption that these values either remain constant or are small

compared to primary supply. The most recent study of secondary stocks was done by the National Petroleum Council in 1989. This study revealed that secondary distillate stocks were equal to about 6.9 percent of distillate stocks and 6.7 percent of distillate storage capacity.

C. Components of Supply and Disposition

The detailed statistics tables in the PSM provide complete supply and disposition information for the current month and year to date. The tables are organized to locate National and Petroleum Administration for Defense (PAD) District supply and disposition data at the front followed by tables that contain detailed information on supply and disposition. These include tables on crude oil and petroleum product production, import/export data, stocks information, and lastly, data on crude oil and petroleum product movements. To assist in the interpretation of these tables, the following discussion of supply, disposition, and ending stocks as shown in Tables 1– 25 is provided. The categories and products are defined in the EIA Glossary.

(1.) Supply

a. Field Production - Total Field Production is the sum of crude oil production and natural gas plant liquids and liquefied refinery gases production.

Crude oil production is an estimate based on data received from State conservation agencies and the Mineral Management Service of the U.S. Department of the Interior. Refer to “Domestic Crude Oil Production” in Section 2C (1) for further details.

Field production of natural gas plant liquids is reported on Form EIA-816 and published on a net basis (i.e., production minus inputs).

b. Renewable Fuels and Oxygenate Plant Net Production - Renewable Fuels and Oxygenate Plant Net Production are reported on Forms EIA-819 and EIA-22M. Production includes oxygenates (fuel ethanol, ETBE, MTBE, and other oxygenates) plus negative production of pentanes plus, finished motor gasoline, and motor gasoline blending components added to fuel ethanol as denaturants as well as biodiesel. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reported as input during the same month.

c. Refinery and Blender Net Production – Refinery and Blender Net Production is reported on Form EIA-810 and EIA-815. Refinery and Blender Net Production equals refinery and blenders production minus refinery and blender net inputs. Negative production of finished petroleum products will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the

same month.

d. Imports - Imports include receipts of goods into the 50 States and the District of Columbia from U.S. possessions and territories or from foreign countries.

e. Net Receipts – Net Receipts data are included in tables containing PAD District-level data to account for inter-PAD District movements of crude oil and petroleum products. Net receipts for a PAD District are calculated by subtracting shipments out of the PAD District from receipts into the PAD District. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge, and Rail between PAD Districts are shown in Table 60.

f. Adjustments – This column includes adjustment quantities for crude oil, fuel ethanol, motor gasoline blending components, biodiesel (included in “Renewable Fuels Except Fuel Ethanol”) and distillate fuel oil. Adjustment quantities are derived either to balance supply and disposition for selected products or to reclassify one product to another product. Product supplied is the balancing item for most products and is interpreted as an implied measure of petroleum demand. Adjustments are used in cases where it does not make sense to interpret the balancing item as demand. Reclassifications reported in the adjustments column may be implied by the supply and disposition balance or reported on surveys. Recall that supply at the U.S. level is equal to the sum of field production, renewable fuels and oxygenate plant net production, refinery and blender net production, imports, and adjustments. Disposition at the U.S. level is equal to the sum of stock change, refinery and blender net inputs, exports, and products supplied. At the PAD District level, supply components include net receipts equal to gross receipts from other PAD Districts minus gross shipments to other PAD Districts. In every case, supply must equal disposition. Applicable components of supply and disposition vary depending on the product or product group. Unless otherwise noted in Section 2C, adjustment calculations that balance supply and disposition equal disposition minus supply for the U.S. and for each PAD District.

(2.) Disposition

a. Stock Change – Stock Change is calculated as the difference between the current month Ending Stocks column and the Ending Stocks column in the prior month’s publication. A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

b. Refinery and Blender Net Inputs – Refinery and Blender Net Inputs are inputs of crude oil and intermediate materials (unfinished oils, motor and aviation gasoline blending components, liquefied petroleum gases, pentanes plus, hydrogen, oxygenates, renewable fuels, and other hydrocarbons) that are processed at refineries or blended at terminals to produce finished petroleum products.

Crude oil input represents total crude oil (domestic and foreign) input to atmospheric crude oil distillation units and other refinery processing units (e.g. vacuum distillation units).

Inputs of natural gas plant liquids are refinery input of natural gas liquids received from natural gas plants for blending and processing. Published inputs of natural gas plant liquids are reported on a gross basis.

Inputs of unfinished oils, motor gasoline blending components, and aviation gasoline blending components are published on a net basis (i.e., refinery input minus refinery production). Negative inputs of unfinished oils and motor and aviation gasoline blending components will occur when the amount of a product produced during the month is greater than the amount of that same product that is input or reclassified to become another product during the same month.

c. Exports - Exports include shipments from the 50 States and the District of Columbia to Puerto Rico, the Virgin Islands, other U.S. possessions and territories and to foreign countries.

d. Products Supplied - Products supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, (plus net receipts on a PAD District basis), plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

Product supplied value indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of the product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported; (2) data were misreported or reported late; (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of inter-PAD movements was incomplete; and (4) products such as gasoline blending components and unfinished oils have entered the primary supply channels with their production not having been reported, e.g., streams returned to refineries from petrochemical plants.

Beginning with data for January 2010, product supplied for crude oil is assumed equal to zero. Prior to January 1983, crude oil burned on leases and by pipelines as fuel was reported as either distillate or residual fuel oil and was included in product supplied for these products. From January 1983 through December 2009, crude oil product supplied was equal to crude oil used directly as reported on Form EIA-813 “Monthly Crude Oil Report.” Reporting of crude oil used directly was discontinued on Form EIA-813 after December 2009.

(3.) Ending Stocks

Ending stocks are primary stocks of crude oil and petroleum products held in storage as of 12 midnight on the last day of the month. Primary stocks include crude oil or petroleum products held in storage at refineries, natural gas processing plants, pipelines, tank farms, and bulk terminals.

Crude oil that is in-transit by water from Alaska and crude oil stored in the Strategic Petroleum Reserve is included. Primary

Crude oil that is in-transit by water from Alaska and crude oil stored in the Strategic Petroleum Reserve is included. Primary Stocks exclude stocks of foreign origin that are held in bonded warehouse storage. Primary stocks of petroleum products also exclude secondary stocks held by dealers and jobbers and tertiary stocks held by consumers. Product stocks held as reserves by federal and state agencies are excluded from primary stock quantities reported by EIA, but quantities held in selected government reserves are provided in Appendix D.

Primary stocks of crude oil included barrels held on producing sites (lease stocks) until June 2016. Primary stocks of crude oil excluded lease stocks beginning with release of PSM data for July 2016 on September 30, 2016. Historical crude oil stocks in Petroleum Navigator were revised beginning with data for January 2005 to exclude lease stocks. Petroleum Navigator data may be accessed from the following locations on the EIA web site.

http://www.eia.gov/dnav/pet/pet_sum_snd_d_nus_mbbbl_m_cur.htm

http://www.eia.gov/dnav/pet/pet_sum_crdsnd_k_m.htm

http://www.eia.gov/dnav/pet/pet_stoc_typ_c_nus_EPC0_mbbbl_m.htm

2. Components - Forms Discussions

The data presented in the PSM include data collected by the EIA on nine monthly petroleum supply surveys, export data obtained from the U. S. Bureau of the Census, and crude production data obtained from State conservation agencies and the Minerals Management Service of the U. S. Department of Interior.

A. Petroleum Supply Reporting System

The nine monthly petroleum supply surveys are part of the Petroleum Supply Reporting System (PSRS). The PSRS tracks the supply and disposition of crude oil, petroleum products, and natural gas liquids in the United States. The PSRS is organized into two data collection subsystems: the Weekly Petroleum Supply Reporting System (WPSRS) and the Monthly Petroleum Supply Reporting System (MPSRS). The WPSRS processes the data from the seven weekly surveys. The MPSRS includes nine monthly surveys and one annual survey. The survey forms that comprise the PSRS are:

1. EIA-800, "Weekly Refinery Report,"
2. EIA-802, "Weekly Product Pipeline Report,"
3. EIA-803, "Weekly Crude Oil Stocks Report,"
4. EIA-804, "Weekly Imports Report,"
5. EIA-805, "Weekly Terminal Blender Report,"
6. EIA-809, "Weekly Oxygenate Report,"
8. EIA-22M, "Monthly Biodiesel Production Survey,"
9. EIA-810, "Monthly Refinery Report,"
10. EIA-812, "Monthly Product Pipeline Report,"
11. EIA-813, "Monthly Crude Oil Report,"
12. EIA-814, "Monthly Imports Report,"
13. EIA-815, "Monthly Terminal Blender Report,"
14. EIA-816, "Monthly Natural Gas Liquids Report"
15. EIA-817, "Monthly Tanker and Barge Movement Report"
16. EIA-819, "Monthly Oxygenate Report"

17. EIA-820, "Annual Refinery Report."

Both weekly and monthly surveys are administered at six key points along the petroleum production and supply chain including refineries, fractionators, natural gas processing plants, bulk product storage and blending terminals, crude oil and product pipelines, crude oil stock holders, importers, and renewable fuel (biodiesel and fuel ethanol) and oxygenate producing plants. Monthly surveys also include inter-PAD District movements by pipelines, tankers, and barges. Weekly surveys do not capture petroleum movements. Respondents reporting on weekly surveys are sampled from among the respondents reporting on monthly surveys.

Annual U.S. refinery capacity data are collected on the Form EIA-820, "Annual Refinery Report." The EIA-820 data are published in the annual "Refinery Capacity Report."

B. Monthly Supply Survey Description and Methodology

(1.) Description of Surveys Forms

Copies of the survey forms and instructions can be found at: http://www.eia.doe.gov/oil_gas/petroleum/survey_forms/pet_survey_forms.html

The Form EIA-22M "Monthly Biodiesel Production Survey" collects data on biodiesel plant location, operating status, annual production capacity, monthly biodiesel and co-product production, stocks, input of feedstocks, alcohol, and catalysts, and biodiesel sales.

The Form EIA-810, "Monthly Refinery Report," collects data on refinery input and capacity, sulfur content and API gravity of crude oil, and data on supply (beginning stocks, receipts, and production) and disposition (inputs, shipments, fuel use and losses, and ending stocks) of crude oil and refined products. Working and shell storage capacity for selected products is collected on a semi-annual basis.

The Form EIA-812, "Monthly Product Pipeline Report," collects data on end-of-month stocks and movements of petroleum products transported by pipeline. Intermediate movements for pipeline systems operating in more than two PAD Districts are included. Product pipeline tank storage capacity for selected products is collected on a semi-annual basis.

The Form EIA-813, "Monthly Crude Oil Report," collects data on end-of-month stock levels of crude oil held at pipeline and tank farms (associated with the pipelines) and terminals operated by the reporting company. Also, crude oil consumed by pipelines and on leases as pump fuel, boiler fuel, etc., is reported. Data are reported on a PAD District basis. Total Alaskan crude oil stocks in-transit by water (including stocks held at transshipment terminals between Alaska and the continental United States) to the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands are also reported by the transporting company having custody of the stocks. Inter-PAD District movements of crude oil by pipeline are collected by the shipping and receiving PAD District. Intermediate movements for pipeline systems operating in more than two PAD Districts

are not included. Crude oil storage capacity of tank farms is collected on a semi-annual basis.

The Form EIA-814, “Monthly Imports Report,” collects data on imports of crude oil and petroleum products (1) into the 50 States and the District of Columbia, (2) into Puerto Rico, the Virgin Islands, and other U.S. possessions (Guam, Midway Islands, Wake Island, American Samoa, and Northern Mariana Islands), and (3) from Puerto Rico, the Virgin Islands, and other U.S. possessions into the 50 States and the District of Columbia. Imports into Foreign Trade Zones located in the 50 States and the District of Columbia are considered imports into the 50 States and the District of Columbia. The type of commodity, port of entry, country of origin, quantity (thousand barrels), sulfur percent by weight, API gravity, and name and location of the processing or storage facility are reported. Sulfur percent by weight is requested for crude oil, crude oil burned as fuel, and residual fuel oil only. API gravity is requested for crude oil only. The name and location of the processing or storage facility is requested for crude oil, unfinished oils, and gasoline blending components only.

The Form EIA-815, “Monthly Terminal Blender Report,” collects data on the operations of all bulk terminals located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U. S. possessions. Beginning and end-of-month stocks, receipts, inputs, production, shipments, and fuel use and losses during the month are collected from operators of terminals. Working and shell storage capacity is collected on a semi-annual basis.

The Form EIA-816, “Monthly Natural Gas Liquids Report,” collects data on the operations of natural gas processing plants and fractionators. Beginning and end-of-month stocks, receipts, inputs, production, shipments, and plant fuel use and losses during the month are collected from operators of natural gas processing plants. End-of-month stocks are collected from fractionators.

The Form EIA-817, “Monthly Tanker and Barge Movement Report,” collects data on the movements of crude oil and petroleum products between PAD Districts. Data are reported by shipping and receiving PAD District and sub-PAD District. Shipments to and from the Panama Canal are also included if the shipment was delivered to the Canal.

The Form EIA-819, “Monthly Oxygenate Report” collects facility-level data on oxygenate inputs, production, gasoline blending at ethanol plants, and end-of-month stocks. Data on end-of-month stocks are reported on a custody basis regardless of ownership. Fuel ethanol storage capacity is collected on a semi-annual basis.

(2.) Frame

EIA maintains complete lists of respondents to its monthly surveys. Each survey has a list of companies and facilities required to submit petroleum activity data. This list is known as the survey frame. Frame maintenance procedures are used to monitor the status of petroleum companies and facilities

currently contained in each survey frame as well as to identify new members to be added to the frame. As a result, all known petroleum supply organizations falling within the definition of “Who Must Submit” participate in the survey.

The activities for frames maintenance are conducted on an ongoing basis. Monthly frames maintenance procedures focus on examining industry periodicals that report changes in status (births, deaths, sales, mergers, and acquisitions) of petroleum facilities producing, transporting, importing, and/or storing crude oil and petroleum products. Augmenting these sources are articles in newspapers, notices from respondents, and information received from survey systems operated by other offices. Survey managers review these sources regularly to monitor changes in company operations and to develop lists of potential respondents. These activities assure coverage of the reporting universe and maintain accurate facility information on addresses and ownership.

Respondents to Form EIA-22M “Monthly Biodiesel Production Survey” include operators of plants that produce biodiesel meeting ASTM D 6751-07B specifications and used for commercial purposes.

Respondents to Form EIA-810, “Monthly Refinery Report” include operators of all operating and idle petroleum refineries located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam and other U.S. possessions.

Respondents to Form EIA-812, “Monthly Product Pipeline Report” include all product pipeline companies that carry petroleum products (including interstate, intrastate, and intra-company pipelines) in the 50 States and the District of Columbia.

Respondents to Form EIA-813, “Monthly Crude Oil Report” include all companies which carry or store 1,000 barrels or more of crude oil. Included in this survey are gathering and trunk pipeline companies (including interstate, intrastate, and intra-company pipelines), crude oil tank farm operators, and companies transporting Alaskan crude oil by water (to U.S. ports) in the 50 States and the District of Columbia.

Respondents to Form EIA-814, “Monthly Imports Report” include each importer of record (or Ultimate consignee in some situations regarding Canadian imports) that import crude oil or petroleum products (1) into the 50 States and the District of Columbia, (2) into Puerto Rico, the Virgin Islands and other U.S. possessions (Guam, Midway Islands, Wake Island, American Samoa, and Northern Mariana Islands), (3) into Foreign Trade Zones located in the 50 States and the District of Columbia and (4) from Puerto Rico, the Virgin Islands and other U.S. possessions into the 50 States and the District of Columbia. A report is required only if there has been an import during the month unless the importer has been selected as part of a sample to report every month regardless of activity.

Respondents to Form EIA-815, “Monthly Terminal Blender Report” include operators of all bulk terminals located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands,

Guam, and other U. S. possessions must report. A bulk terminal is primarily used for storage, marketing, and often blending of petroleum products and has a total bulk storage capacity of 50,000 barrels or more, and/or receives petroleum products by tanker, barge, or pipeline. Bulk terminal facilities associated with a product pipeline are included.

Respondents to Form EIA-816, “Monthly Natural Gas Liquids Report” include operators of all facilities that extract liquid hydrocarbons from a natural gas stream (natural gas processing plant) and/or separate a liquid hydrocarbon stream into its component products (fractionator).

Respondents to Form EIA-817, “Monthly Tanker and Barge Movement Report” include all companies that have custody of crude oil or petroleum products transported by tanker or barge between Petroleum Administration for Defense Districts and all companies that have custody of crude oil or petroleum products originating from a PAD District and transported to the Panama Canal with the intent that the crude oil or petroleum products be further transported to another PAD District.

For purposes of this report, custody is defined as physical possession of crude oil or petroleum products on a company-owned tanker or barge. Also, companies that lease vessels or contract for the movement of crude oil or petroleum products on a tanker or barge between PAD Districts are considered to have custody.

Respondents to Form EIA-819, “Monthly Oxygenate Report” include all operators of facilities that produce (manufacture or distill) oxygenates (including MTBE plants, petrochemical plants, and refineries that produce oxygenates as part of their operations located in the 50 States and the District of Columbia.)

(3.) Collection

Survey data for the MPSRS are collected by facsimile, email, Internet using secure file transfer, and electronic transmission. All respondents must submit their data by the 20th calendar day following the end of the report month. Receipt of the reports is monitored using an automated respondent mailing list. Telephone follow-up calls are made to nonrespondents prior to the publication deadline. Respondents who are chronically late (i.e., 3 consecutive months) are notified by EIA by certified letter.

(4.) Processing and Micro Editing

Upon receipt, all reported data are transformed into a standard format and sent through a log-in and prescreening process to validate respondent control information and resolve any discrepancies. The data are then processed using generalized edit and imputation procedures. Automated editing procedures check current data for consistency with past data and for internal consistency (e.g., totals equal to the sums of the parts). After the edit failures are resolved and imputation performed for nonrespondents, preliminary tables are produced and used to identify anomalies. These tables show U.S. and PAD District estimates for the current month and the prior 4 years. Anomalies

result in further review of respondent data which in turn may result in additional flagged data and imputation.

(5.) Estimation and Imputation

The nine monthly supply surveys are census surveys. As such, the estimates using these data are the sum of the edited, reported data. Imputation is performed for companies that fail to file Forms EIA-22M, 810, 812, 813, 815, 816, and 819. For these companies, previous monthly values and values reported on the weekly survey forms are used if available. Data for nonrespondents to the Forms EIA-814 and 817 are not imputed because respondent-level data for these surveys are highly variable.

Adjustments are made to aggregate data from time to time. For example, unusual industry conditions, including fuel transitions, business practice shifts, or hurricane dislocations, may generate reporting anomalies and require adjustments. Measurement error and frame deficiencies may occasionally result in inconsistencies when individual respondent data are aggregated to publication levels and require adjustment. Monthly supply data are reviewed throughout the year and some estimates may be replaced with newly available or resubmitted respondent data in the *Petroleum Supply Annual (PSA)*.

(6.) Macro Editing

Monthly data are compared to weekly data on a regular basis. Discrepancies between weekly and monthly data are documented and respondents are called when discrepancies are either large (usually over 300 thousand barrels) or consistent (e.g., weekly data are always lower than monthly data). In addition, a comparison of the data collected on the PSRS with other similar data series from sources outside of the EIA is performed on an ongoing basis. Results of selected data comparisons are published once a year in the feature article, “Comparison of Independent Statistics on Petroleum Supply.” Additional comparisons are made between survey data and model results. Data reported in the Petroleum Supply Monthly and Petroleum Supply Annual are routinely imputed to correct for cases where comparison with other data suggests errors in survey data.

(7.) Dissemination

The *PSM* data are normally released within 60 days of the close of the reference month. The *PSM* is available on the web at:

<http://www.eia.gov/petroleum/supply/monthly/>

Much of the *PSM* data are available on the web product, Petroleum Navigator. Petroleum Navigator provides an interface for accessing a comprehensive set of EIA’s petroleum data. Features include: downloadable spreadsheets containing complete data history, data tables which “pivot” to present different perspectives, and selection boxes to easily change the product, area, process, period, and unit of measure. Petroleum Navigator can be accessed at: <http://www.eia.gov/petroleum/data.cfm>

C. Derived Data

Due to the time constraints in publishing monthly petroleum supply statistics and the desire to reduce industry response burden, some of the statistics published in the PSM are obtained from sources other than the monthly supply surveys. These other sources include models to data and data from supplemental sources such as the Bureau of the Census.

(1.) Domestic Crude Oil Production

The interim estimate of U.S., PAD District, and state oil production for the current reference month, published in Tables 1 through 26 of the PSM, are based on:

- (a.) crude oil production data from state government agencies and the Department of the Interior, Bureau of Safety and Environmental Enforcement;
- (b.) crude oil production data reported on Form EIA-914, “Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report.” For some states, EIA uses current reported data from the state (chiefly Alaska). For the states of Arkansas, California, Colorado, Kansas, Louisiana, Montana, New Mexico, North Dakota, Ohio, Oklahoma, Pennsylvania, Texas, Utah, West Virginia, Wyoming, and the Federal Gulf of Mexico, EIA calculates an estimate by modeling the relationship between final state-level data from DrillingInfo, a third-party vendor of well-level data collected by state agencies, and data reported on the EIA-914 survey using weighted least squares (WLS) linear regression. Additional explanation of the WLS estimation methodology is available. Estimates have to be made for crude oil production because complete and correct data from states may take from several months to over two years.
- (c.) first purchase data reported on Form EIA-182 “Domestic Crude Oil First Purchase Report.” For the remaining states and areas (Alabama, Arizona, Federal Pacific Offshore, Florida, Idaho, Illinois, Indiana, Kentucky, Maryland, Michigan, Mississippi, Missouri, Nebraska, Nevada, New York, Oregon, South Dakota, Tennessee, and Virginia) EIA calculates an estimate by using the average lagged ratio (ALR) of the state reported data to EIA-182 data, applied to the current EIA-182 data. Additional explanation of the ALR estimation methodology is available.

State-level production estimates are published in Table 26, “Production of Crude Oil by PAD District and State.” Table 26 contains estimates for crude oil production for state and federal offshore areas reported by state agencies and the Bureau of Safety and Environmental Enforcement or estimated by EIA using the ALR or WLS methods discussed above. Every month, the monthly crude oil production estimates are updated in Table 26 of the Petroleum Supply Monthly (<http://www.eia.gov/petroleum/supply/monthly/>) using reports from state agencies and the Bureau of Safety and Environmental Enforcement. The estimates are reported in the Petroleum

Navigator and the Petroleum Supply Monthly roughly 60 days after the production month.

(2.) Exports

The U.S. Bureau of the Census compiles the official U.S. export statistics. Exporters are required to file a “Shipper’s Export Declaration Document” with the U.S. Census Bureau. Each month the EIA receives aggregated export statistics from the U.S. Bureau of the Census (EM-522 and EM-594). Census export statistics used in the PSM reflect both government and non-governmental exports of domestic and foreign merchandise from the United States (the 50 States and the District of Columbia) to foreign countries and U.S. possessions, without regard to whether or not the exportation involves a commercial transaction. The following types of transactions are excluded from the statistics:

- Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
- Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

(3.) Movements of crude oil by railroad

The volume of crude oil, ethanol, biodiesel, propane, propylene, normal butane, and isobutane moving by railroad is calculated using several data sources including Carload Waybill Sample (CWS) data from the U.S. Surface Transportation Board (STB), data from the National Energy Board of Canada (NEB), data in EIA’s Oil and Gas Supply Module (OGSM) within the National Energy Modeling system (NEMS) for data prior to 2015, the EIA-915 survey starting in January 2015, and an estimation procedure developed by EIA for months in which data these data are not available.

Once the data necessary for calculating rail movements become available, which may take as long as 60 days after the end of a calendar quarter, EIA will revise the estimates made.

Movements of crude oil, ethanol, biodiesel, propane, propylene, normal butane, and isobutane by rail are based on EIA analysis of carload data from the STB CWS. Additional data from the NEB, OGSM, and the EIA-915 are used for estimating factors for converting carloads to barrels of crude oil. Carloads of ethanol, biodiesel, propane, propylene, normal butane, and isobutane are converted to barrels using data from the CWS.

Carload data from the STB are available approximately 60 days after the end of each quarter. For example, carload data for the first quarter of each year are typically available by about June 1. Therefore, recent-month rail movements reported by EIA in the Petroleum Supply Monthly and Petroleum Navigator are modeled based on historical rail movement averages, medians, or correlations of rail movements derived from actual carload data with other regional supply data collected by EIA or other sources including field production, imports, refinery and blender inputs, movements other than rail, exports, and supply adjustments.

Estimates of rail movements are subject to revision on a monthly basis as new, more complete, and more accurate data become available. Monthly revisions will typically affect data available through Petroleum Navigator on the EIA web site for the current year and up to two prior years. To the extent that revisions are needed to data more than 2 years in the past, these revisions will be made once a year at the time when Petroleum Navigator tables are updated with final data for a year from the Petroleum Supply Annual. Petroleum Supply Monthly and Petroleum Supply Annual tables released as PDF files will not be revised.

(4.) Stocks of Crude Oil held on Producing Sites (Lease Stocks)

The adjustment for lease stocks was discontinued beginning with PSM data for July 2016 released on September 30, 2016 because EIA discontinued reporting crude oil stocks held on producing sites (lease stocks). The lease stock adjustment remains in all historical EIA lease stocks data.

This adjustment corrects for incomplete survey coverage of companies that store crude oil on leases. Up until 1983, monthly state government data on lease stocks were substituted for EIA data wherever possible in order to rectify the understatement of lease crude oil stocks. State data were available from three states - Texas, New Mexico, and Montana. To calculate the “lease adjustment,” a comparison between EIA reported data and the state government data was made and the difference added to the EIA data for the respective states.

In 1983, the EIA modified the Form EIA-813 to eliminate state data on crude oil stocks and began collecting crude oil stock data by Petroleum Administration for Defense (PAD) District. With this change, the “lease adjustment” could no longer be calculated on a state basis and was changed to a PAD District level. To adjust for this incomplete coverage, 10,300 thousand barrels of crude oil are added to PAD District 3 stocks and 330 thousand barrels are added to PAD District 4 stocks.

(5.) Trans-Alaska Pipeline System (TAPS) Natural Gas Plant Liquids (NGPL Adjustment)

The TAPS-NGPL adjustment corrects for overstatement of crude oil receipts and input at refineries due to NGPL injection into Alaskan crude oil transported in TAPS. Natural gas

processing plants in Alaska produce substantial volumes of NGPL that are added to crude oil transported through TAPS. Refiners have been unable to separate the volume of NGPL from Alaskan crude oil when reporting crude oil receipts and inputs to EIA. The TAPS-NGPL adjustment subtracts Alaskan NGPL production reported by selected gas processing plant operators from crude oil receipts and inputs reported by refiners. Adjusted NGPL production is added to refinery receipts and inputs of NGPL. The adjusted NGPL barrels are allocated to PAD Districts based on the regional distribution of receipts of Alaskan crude oil. Data most affected by the TAPS-NGPL adjustment are receipts and inputs of crude oil in PAD District 5 and receipts, inputs, and product supplied of butane and pentanes plus also in PAD District 5.

NGPL injections into crude oil transported in the TAPS started in 1987. The TAPS-NGPL adjustment was first applied to revised data reported in the Petroleum Supply Annual (PSA) for 1988.

(6.) Finished Motor Gasoline Adjustment

Adjustment quantities for finished motor gasoline are the sum of motor gasoline blending components, fuel ethanol, and methyl tertiary butyl ether (MTBE) adjustments reclassified to finished motor gasoline. Finished motor gasoline adjustment quantities are assumed to reflect gasoline blending activity that was not reported on surveys.

Note on MTBE Adjustment: The MTBE portion of the gasoline adjustment described in this section was only applied to Petroleum Supply Monthly (PSM) data for 2009. The MTBE portion of the gasoline adjustment was discontinued after further examination of the issue made clear the MTBE adjustment was not helpful in forming an accurate statistical representation of U.S. and regional gasoline supplies. The MTBE adjustment was not applied to gasoline supply and disposition data in years prior to 2009, nor was it applied to revised data for 2009 published in the Petroleum Supply Annual or in years after 2009. This note only applies to MTBE adjustments. MTBE blending that was reported on EIA surveys is reflected in U.S. and regional gasoline supply and disposition data. Other adjustments to gasoline supply and disposition data to account for motor gasoline blending components and fuel ethanol remain as described in this section.

- Adjustment quantities for finished reformulated motor gasoline include adjustments for reformulated blendstock for oxygenate blending (RBOB) plus a percentage of gasoline treated as blendstock (GTAB), “other” motor gasoline blending components, fuel ethanol, and MTBE. The quantity of GTAB and “other” motor gasoline blending components adjustments reclassified to finished reformulated motor gasoline is based on the ratio of finished reformulated motor gasoline net production divided by total finished motor gasoline net production reported on surveys by refiners and blenders in each

PAD District. Motor gasoline blending components adjustments reclassified to finished reformulated motor gasoline are further classified as blended with alcohol (i.e. fuel ethanol), blended with ether (i.e. MTBE), or non-oxygenated during 2009.

Starting with data for January 2010, motor gasoline blending component adjustment quantities were classified only as blended with fuel ethanol and “other”. During 2009, RBOB adjustment quantities were classified based on the product description that included reference to the oxygenate to be blended. Beginning with data for January 2010, all RBOB is reported in one product category without reference to specific oxygenates, and all RBOB adjustment quantities are assumed blended with fuel ethanol. During 2009, adjustment quantities for GTAB and “other” motor gasoline blending components reclassified to finished reformulated gasoline were further classified as blended with ether, blended with alcohol, or non-oxygenated based on the ratio of production of these products in reported survey data. After determining adjustment quantities of motor gasoline blending components reclassified to each type of finished reformulated motor gasoline, portions of the fuel ethanol and MTBE adjustments were reclassified to reformulated motor gasoline. The fuel ethanol quantity reclassified to finished reformulated motor gasoline was determined using the ratio of fuel ethanol blended into finished motor gasoline calculated from fuel ethanol blending data reported on survey forms by PAD District. For example, if the calculated volumetric fuel ethanol blend ratio was 10%, then a quantity of the fuel ethanol adjustment sufficient to make a 10% blend with the available motor gasoline blending components is reclassified to finished reformulated motor gasoline, but the quantity of fuel ethanol cannot exceed the total quantity of the fuel ethanol adjustment. During 2009, a similar process was followed for allocating the MTBE adjustment to reformulated motor gasoline except the blend ratio was assumed to be 12% in all PAD Districts. Starting with data for January 2010, the entire MTBE adjustment quantity is assumed to be blended with finished conventional motor gasoline.

- Adjustment quantities for finished conventional motor gasoline include adjustments for conventional blendstock for oxygenate blending (CBOB) plus the portion of GTAB, “other” motor gasoline blending components, fuel ethanol and MTBE adjustments that were not reclassified to finished reformulated motor gasoline. The total adjustment to finished conventional motor gasoline is further classified as finished conventional gasoline blended with fuel ethanol and “other” finished conventional motor gasoline. The quantity of the finished conventional motor gasoline adjustment reclassified as finished conventional motor gasoline blended with fuel ethanol is determined using the quantity of the fuel ethanol adjustment allocated

to finished conventional motor gasoline and the fuel ethanol blend ratio calculated from fuel ethanol blending reported on surveys by PAD District. For example, if the fuel ethanol blend ratio calculated from survey data was 10% in a PAD District, then the total adjustment quantity of finished conventional motor gasoline in that PAD District would be 10 times the fuel ethanol adjustment quantity allocated to finished conventional gasoline (i.e. the adjustment to finished conventional motor gasoline blended with fuel ethanol includes 10% fuel ethanol and 90% gasoline from the motor gasoline blending components adjustment). The MTBE adjustment allocated to finished conventional motor gasoline is simply added to the adjustment for “other” finished conventional motor gasoline.

- Fuel ethanol adjustment quantities frequently exceed the volume of fuel ethanol needed to achieve a blend ratio implied by blending activity reported by refiners and blenders on surveys when considering only the gasoline barrels available from the motor gasoline blending components adjustment. In this case, “other” finished conventional motor gasoline is reclassified by the adjustment to finished conventional motor gasoline blended with alcohol in order to maintain an ethanol blend ratio equal to the fuel ethanol blend ratio reported by refiners and blenders in each PAD District.

(7.) Motor Gasoline Blending Components Adjustment

Adjustment quantities for motor gasoline blending components at the U.S. level equal the sum of stock change, refinery and blender net input, and exports minus the sum of imports and renewable fuels and oxygenate plant net production (i.e. motor gasoline blending components use as denaturant for fuel ethanol production). Adjustment quantities by PAD District equal the sum of stock change, refinery and blender net input, and exports minus the sum of imports, renewable fuels and oxygenate plant net production, and net receipts. Motor gasoline blending components adjustments are calculated for reformulated blendstock for oxygenate blending (RBOB), conventional blendstock for oxygenate blending (CBOB), gasoline treated as blendstock (GTAB), and “other” motor gasoline blending components. Product supplied for motor gasoline blending components is assumed to always equal zero because there is no end-user demand for motor gasoline blending components as anything other than finished motor gasoline. Motor gasoline blending components adjustment quantities are assumed to reflect finished motor gasoline blending implied by the supply and disposition balance but not reported on surveys. Adjustment quantities for motor gasoline blending components are reclassified to finished motor gasoline and added to the finished motor gasoline adjustment.

(8.) Renewable Fuels including Fuel Ethanol Adjustment

Adjustment quantities for renewable fuels (including fuel ethanol) at the U.S. level equal the sum of stock change, refinery and blender net input, and exports minus the sum

of renewable fuels and oxygenate plant net production and imports. Calculation of adjustment quantities by PAD District depends on the product. Individual products include fuel ethanol, biomass based diesel fuel (including biodiesel), “other” renewable diesel fuel, and “other” renewable fuels (e.g. bio-jet fuel). Product supplied for renewable fuels (including fuel ethanol) is assumed equal to zero. Adjustments for fuel ethanol and “other” renewable fuels are discussed separately below.

- Fuel ethanol adjustment quantities at the U.S. level equal the sum of stock change, refinery and blender net input, and exports minus the sum of renewable fuels and oxygenate plant net production and imports. There are no survey data available for rail movements of fuel ethanol between PAD Districts, and so allocation of fuel ethanol adjustments to PAD Districts is based on the ratio of fuel ethanol blending reported on surveys in each PAD District divided by fuel ethanol blending reported on surveys for the entire U.S. In this case, Fuel ethanol implied net receipts are calculated for each PAD District as the sum of stock change, refinery and blender net input, and exports minus the sum of renewable fuels and oxygenate plant net production, imports, and adjustments. Fuel ethanol implied net receipts are the balancing item between total supply and disposition in each PAD District. Fuel ethanol adjustment quantities are assumed to reflect blending of fuel ethanol into finished motor gasoline that is implied by the available supply of fuel ethanol but not reported on surveys. Fuel ethanol adjustment volumes are reclassified to finished reformulated motor gasoline and finished conventional motor gasoline through finished motor gasoline adjustments.

- The product category called “renewable fuels except fuel ethanol” includes biomass-based diesel fuel (including biodiesel), “other” renewable diesel fuel, and “other” renewable fuels (e.g. bio-jet fuel). For PSM data prior to January 2012, renewable fuels except fuel ethanol adjustment quantities at the U.S. and PAD District levels were calculated as the sum of stock change, refinery and blender net input, and exports minus imports. Data for production of Renewable Fuels except Fuel Ethanol was unavailable and was excluded from Renewable Fuels and Oxygenate Plant Net Production. Therefore the calculation of adjustments to Renewable Fuels except Fuel Ethanol caused production to be included in the adjustment. Similarly, the calculation caused net inter-PAD District movements (i.e. net receipts) by rail and truck to also be included in adjustments to renewable fuels except fuel ethanol.

- Beginning with PSM data for January 2012, production of biodiesel reported on Form EIA-22M was included under the heading of “renewable fuels and oxygenate plant net production” in petroleum

supply and disposition balances for “renewable fuels except fuel ethanol”. As a result, the adjustment for “renewable fuels except fuel ethanol” no longer includes production of biodiesel. This change will also be made to revised monthly data for January-December 2011 when the 2011 Petroleum Supply Annual is released.

- Biodiesel adjustment quantities at the U.S. level equal the sum of stock change, refinery and blender net input, and exports minus the sum of renewable fuels and oxygenate plant net production and imports. There are no survey data available for rail movements of biodiesel between PAD Districts, and so allocation of fuel biodiesel adjustments to PAD Districts is based on the ratio of biomass-based diesel blending reported on surveys in each PAD District divided by biomass-based diesel fuel blending reported on surveys for the entire U.S. Biodiesel implied net receipts are calculated for each PAD District as the sum of stock change, refinery and blender net input, and exports minus the sum of renewable fuels and oxygenate plant net production, imports, and adjustments. Biodiesel implied net receipts are the balancing item between total supply and disposition in each PAD District. Biodiesel adjustment quantities are assumed to reflect blending of biodiesel into distillate fuel oil that is implied by the available supply of biodiesel but not reported as input on surveys. Biodiesel adjustment volumes are reclassified to distillate fuel oil (15 ppm sulfur and under) through distillate fuel oil adjustments.

(9.) Distillate Fuel Oil Adjustment

Adjustment quantities for distillate fuel oil show reclassification by pipeline operators of distillate fuel oil with sulfur content of 15 ppm and under to distillate fuel oil with sulfur content greater than 15 ppm to 500 ppm (inclusive). Reclassification may occur when distillate product with sulfur content of 15 ppm and under becomes mixed with products having higher sulfur content during pipeline transportation, storage, or handling. Adjustment quantities are reported by pipeline operators on Form EIA-812 “Monthly Product Pipeline Report.” This adjustment was discontinued after publication of data for December 2010

Beginning with PSM data for January 2012, distillate fuel oil adjustments equal the opposite of biodiesel adjustments described above in section 7. Biodiesel adjustments are added to distillate fuel oil (15 ppm sulfur and under) and to total distillate fuel oil. Distillate fuel oil adjustment quantities are assumed to reflect biodiesel blending activity implied by biodiesel supply and disposition but not reported on surveys. Distillate fuel oil adjustments for biodiesel will also be added to revised data for January-December 2011 when the 2011 Petroleum Supply Annual is released.

(10.) Crude Oil Adjustment

Adjustment quantities for crude oil are derived to balance crude oil supply and disposition. Crude oil product supplied was equal to crude oil used directly as reported on Form EIA-813 “Monthly Crude Oil Report” in data through December 2009. Reporting crude oil used directly was discontinued on Form EIA-813 after collection of data for December 2009. Crude oil product supplied is assumed equal to zero beginning with data for January 2010. Undercounting crude oil imports in survey data is one example of a typical cause of crude oil adjustments. This results in a positive crude oil adjustment because crude oil disposition (i.e. the sum of stock change, refiner inputs, and exports) will exceed available supply (i.e. the sum of field production and imports) due to import undercounting. Crude oil losses are included in crude oil adjustment quantities. The crude oil adjustment was formerly called unaccounted-for crude oil. The name change was effective with data for January 2005.

(11.) Other Hydrocarbon Adjustment

Adjustment quantities for “other” hydrocarbons equal the sum of stock change, refinery and blender net inputs and exports minus imports. “Other” hydrocarbons product supplied is assumed equal to zero. Adjustment quantities account for “other” hydrocarbons produced outside of refineries. There are no movements data collected on surveys for “other” hydrocarbons. Therefore, adjustment quantities include any net receipts of “other” hydrocarbons resulting from inter-PAD District movements.

(12.) Hydrogen Adjustment

Adjustment quantities for hydrogen equal refinery and blender net input of hydrogen. Hydrogen product supplied is assumed equal to zero. Adjustment quantities account for hydrogen supplied to U.S. refineries from non-refinery sources. There are no movements data collected on surveys for hydrogen. Therefore, adjustment quantities at the PAD District level include any net receipts of hydrogen resulting from inter-PAD District movements.

(13.) Oxygenates (excluding fuel ethanol) Adjustment

Adjustment quantities for oxygenates (excluding fuel ethanol) equal the sum of stock change, refinery and blender net inputs, and exports minus the sum of renewable fuels and oxygenate plant net production and imports. Product supplied for oxygenates (excluding fuel ethanol) is assumed equal to zero. Methyl tertiary butyl ether (MTBE) is the single largest component of oxygenates (excluding fuel ethanol).

3. Quality

A. General Discussion

(1.) Response Rates

The response rate is generally 98 to 100 percent. Average response rates for the monthly and weekly surveys are published in the annual PSM article “Accuracy of Petroleum Supply Data.” Chronic nonrespondents and late filing respondents are contacted in writing and reminded of their requirement to report. Companies that file late or fail to file are subject to criminal fines, civil penalties, and other sanctions as provided by Section 13(i) of the Federal Energy Administration (FEA) Act.

(2.) Non-sampling Errors

There are two types of errors usually associated with data produced from a survey; sampling errors and nonsampling errors. Because the estimates for the monthly surveys are based on a complete census of the frame, there is no sampling error in the data presented. The data, however, are subject to non-sampling errors. Non-sampling errors may arise from a number of sources including: (1) the inability to obtain data from all companies in the frame (non-response) and the method used to account for non-response, (2) response errors, (3) differences in the interpretation of questions or definitions, (4) mistakes in recording or coding of the data obtained from respondents, and (5) other errors of collection, response, coverage, processing, and estimation.

(3.) Resubmissions

Throughout the year, EIA accepts data revisions of monthly data. If a revision to a monthly submission is made after the PSM has been published, it is referred to as a resubmission. The final monthly values for the previous year are published in the PSA. These values reflect all PSM resubmissions and other data corrections. The values contained in the PSA are EIA’s most accurate measure of petroleum supply activity.

(4.) Revision Policy

EIA will publish revised monthly crude oil production estimates going back to the Previously published Petroleum Supply Annual every month in the Petroleum Supply Navigator (<http://www.eia.gov/petroleum/supply/monthly/>). Once a year with the release of the Petroleum Supply Annual, EIA will revise up to 10 years of historical production estimates in the Petroleum Supply Navigator.

B. Data Assessment

The principal objective of the PSRS is to provide an accurate picture of petroleum industry activities and of the availability of petroleum products nationwide from primary distribution channels. The PSM preliminary monthly data serve as leading indicators of the final monthly data published in the PSA. The PSM monthly data are not expected to have the same level of accuracy as the final monthly data published in the PSA. However, the preliminary monthly data are expected to exhibit like trends and product flow characteristic of the final monthly data.

To assess the accuracy of monthly statistics, initial monthly estimates published in the PSM are compared with the final monthly aggregates published in the PSA. Although final monthly data are still subject to error, they have been thoroughly reviewed and edited, they reflect all revisions made during the year, and they are considered to be the most accurate data available. The mean absolute percent error provides a measure of the average revisions relative to the aggregates being measured for a variable. The mean absolute percent error for 2007 monthly data was less than 1 percent for 50 of the 66 major petroleum variables analyzed.

4. Provisions Regarding Disclosure of Information

All PSRS survey forms, with the exception of the Form EIA-814, "Monthly Imports Report," have the same general disclosure information statement. The information reported on Form EIA-814 will be considered "public information" and may be publicly released in company or individually identifiable form, and will not be protected from disclosure in identifiable form.

The information reported on Forms EIA-810 through 813, 815 through 817, 819, and 820 will be protected and not disclosed to the

public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. §552, the Department of Energy (DOE) regulations, 10 C.F.R. §1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905. The Federal Energy Administration Act requires the EIA to provide company-specific data to other Federal agencies when requested for official use. The information reported on this form may also be made available, upon request, to another DOE component; to any Committee of Congress, the Government Accountability Office, or other Federal agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order. The information may be used for any nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

Disclosure limitation procedures are not applied to the statistical data published from this survey's information. Thus, there may be some statistics that are based on data from fewer than three respondents, or that are dominated by data from one or two large respondents. In these cases, it may be possible for a knowledgeable person to estimate the information reported by a specific respondent.

In addition to the use of the information by EIA for statistical purposes, the information may be made available, upon request, to other Federal agencies authorized by law to receive such information for any nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

Company specific data are also provided to other DOE offices for the purpose of examining specific petroleum operations in the context of emergency response planning and actual emergencies.

Northeast Reserves

Reserves inventories are not considered to be in the commercial sector and are excluded from EIA's commercial motor gasoline and distillate fuel oil supply and disposition statistics, such as those reported in the *Weekly Petroleum Status Report*, *Petroleum Supply Monthly*, and *This Week In Petroleum*.

Northeast Home Heating Oil Reserve classified as ultra-low sulfur distillate (15 parts per million)

Terminal Operator	Location	Thousand Barrels
Buckeye Partners LP	Port Reading, NJ	300
Buckeye Partners LP	Groton, CT	300
Global Companies LLC	Revere, MA	400

Source: U. S. Energy Information Administration

Northeast Regional Refined Petroleum Product Reserve motor gasoline products

Terminal Operator	Location	Thousand Barrels
Kinder Morgan Liq Terminals LLC	Carteret, NJ	200
Buckeye Terminals LLC	Port Reading, NJ	0
Buckeye Terminals LLC	Raritan Bay, NJ	500
Global Companies LLC	Revere, MA	200
South Portland Terminal LLC	South Portland, ME	99

Source: U. S. Energy Information Administration

Other reserves information from the U.S. Department of Energy, Office of Petroleum Reserves can be found at <http://energy.gov/fe/services/petroleum-reserves/>

State of New York's Strategic Fuels Reserve Program

State reserve inventories are also not considered to be in the commercial sector and are excluded from EIA's commercial inventories and are excluded from supply and disposition statistics, such as those reported in the *Weekly Petroleum Status Report*, *Petroleum Supply Monthly*, and *This Week In Petroleum*.

Product	Location	Thousand Barrels
Motor Gasoline Blending Components	NY	89
Fuel Ethanol	NY	10
Distillate Fuel Oil, 15 ppm Sulfur and Under	NY	34

Source: New York State Energy Research & Development Authority

Definitions of Petroleum Products and Other Terms

(Revised May 2010)

Alcohol. The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; $\text{CH}_3\text{-(CH}_2\text{)}_n\text{-OH}$ (e.g., methanol, ethanol, and tertiary butyl alcohol).

Alkylate. The product of an alkylation reaction. It usually refers to the high octane product from alkylation units. This alkylate is used in blending high octane gasoline.

Alkylation. A refining process for chemically combining isobutane with olefin hydrocarbons (e.g., propylene, butylene) through the control of temperature and pressure in the presence of an acid catalyst, usually sulfuric acid or hydrofluoric acid. The product, alkylate, an isoparaffin, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

All Other Motor Gasoline Blending Components. See Motor Gasoline Blending Components.

API Gravity. An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$\text{Degrees API} = \frac{141.5}{\text{sp. gr. @ } 60^\circ \text{ F}} - 131.5$$

The higher the API gravity, the lighter the compound. Light crudes generally exceed 38 degrees API and heavy crudes are commonly labeled as all crudes with an API gravity of 22 degrees or below. Intermediate crudes fall in the range of 22 degrees to 38 degrees API gravity.

Aromatics. Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene (BTX).

Asphalt. A dark-brown-to-black cement-like material containing bitumens as the predominant constituent obtained by petroleum processing; used primarily for road construction. It includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. Note: The conversion factor for asphalt is 5.5 barrels per short ton.

ASTM. The acronym for the American Society for Testing and Materials.

Atmospheric Crude Oil Distillation. The refining process of separating crude oil components at atmospheric pressure by heating to temperatures of about 600 degrees Fahrenheit to 750 degrees Fahrenheit (depending on the nature of the crude oil and desired products) and subsequent condensing of the fractions by cooling.

Aviation Gasoline (Finished). A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in aviation reciprocating

engines. Fuel specifications are provided in ASTM Specification D 910 and Military Specification MIL-G-5572. Note: Data on blending components are not counted in data on finished aviation gasoline.

Aviation Gasoline Blending Components. Naphthas which will be used for blending or compounding into finished aviation gasoline (e.g., straight-run gasoline, alkylate, reformat, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus. Oxygenates are reported as other hydrocarbons, hydrogen, and oxygenates.

Barrel. A unit of volume equal to 42 U.S. gallons.

Barrels Per Calendar Day. The amount of input that a distillation facility can process under usual operating conditions. The amount is expressed in terms of capacity during a 24-hour period and reduces the maximum processing capability of all units at the facility under continuous operation (see **Barrels per Stream Day**) to account for the following limitations that may delay, interrupt, or slow down production:

the capability of downstream facilities to absorb the output of crude oil processing facilities of a given refinery. No reduction is made when a planned distribution of intermediate streams through other than downstream facilities is part of a refinery's normal operation;

the types and grades of inputs to be processed;

the types and grades of products expected to be manufactured;

the environmental constraints associated with refinery operations;

the reduction of capacity for scheduled downtime due to such conditions as routine inspection, maintenance, repairs, and turnaround; and

the reduction of capacity for unscheduled downtime due to such conditions as mechanical problems, repairs, and slowdowns.

Barrels Per Stream Day. The maximum number of barrels of input that a distillation facility can process within a 24-hour period when running at full capacity under optimal crude and product slate conditions with no allowance for downtime.

Benzene (C_6H_6). An aromatic hydrocarbon present in small proportion in some crude oils and made commercially from petroleum by the catalytic reforming of naphthenes in petroleum naphtha. Also made from coal in the manufacture of coke. Used as a solvent, in manufacturing detergents, synthetic fibers, and petrochemicals and as a component of high-octane gasoline.

Biomass-Based Diesel Fuel. Biodiesel and other renewable diesel fuel or diesel fuel blending components derived from biomass, but excluding renewable diesel fuel coprocessed with petroleum

feedstocks.

Blending Components. See *Motor or Aviation Gasoline Blending Components*.

Blending Plant. A facility which has no refining capability but is either capable of producing finished motor gasoline through mechanical blending or blends oxygenates with motor gasoline.

Bonded Petroleum Imports. Petroleum imported and entered into Customs bonded storage. These imports are not included in the import statistics until they are: (1) withdrawn from storage free of duty for use as fuel for vessels and aircraft engaged in international trade; or (2) withdrawn from storage with duty paid for domestic use.

BTX. The acronym for the commercial petroleum aromatics benzene, toluene, and xylene. See individual categories for definitions.

Bulk Station. A facility used primarily for the storage and/or marketing of petroleum products which has a total bulk storage capacity of less than 50,000 barrels and receives its petroleum products by tank car or truck.

Bulk Terminal. A facility used primarily for the storage and/or marketing of petroleum products which has a total bulk storage capacity of 50,000 barrels or more and/or receives petroleum products by tanker, barge, or pipeline.

Butane (C_4H_{10}). A normally gaseous straight-chain or branch-chain hydrocarbon extracted from natural gas or refinery gas streams. It includes normal butane and refinery-grade butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

Normal Butane (C_4H_{10}). A normally gaseous straight-chain hydrocarbon that is a colorless paraffinic gas which boils at a temperature of 31.1 degrees Fahrenheit and is extracted from natural gas or refinery gas streams.

Refinery-Grade Butane (C_4H_{10}). A refinery-produced stream that is composed predominantly of normal butane and/or isobutane and may also contain propane and/or natural gasoline. These streams may also contain significant levels of olefins and/or fluorides contamination.

Butylene (C_4H_8). An olefinic hydrocarbon recovered from refinery processes.

Captive Refinery Oxygenate Plants. Oxygenate production facilities located within or adjacent to a refinery complex.

Catalytic Cracking. The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil. Catalytic cracking processes fresh feeds and recycled feeds.

Fresh Feeds. Crude oil or petroleum distillates which are being fed to processing units for the first time.

Recycled Feeds. Feeds that are continuously fed back for additional processing.

Catalytic Hydrocracking. A refining process that uses hydrogen and catalysts with relatively low temperatures and high pressures for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel, and/or high grade fuel oil. The process uses one or more catalysts, depending upon product output, and can handle high sulfur feedstocks without prior desulfurization.

Catalytic Hydrotreating. A refining process for treating petroleum fractions from atmospheric or vacuum distillation units (e.g., naphthas, middle distillates, reformer feeds, residual fuel oil, and heavy gas oil) and other petroleum (e.g., cat cracked naphtha, coker naphtha, gas oil, etc.) in the presence of catalysts and substantial quantities of hydrogen. Hydrotreating includes desulfurization, removal of substances (e.g., nitrogen compounds) that deactivate catalysts, conversion of olefins to paraffins to reduce gum formation in gasoline, and other processes to upgrade the quality of the fractions.

Catalytic Reforming. A refining process using controlled heat and pressure with catalysts to rearrange certain hydrocarbon molecules, thereby converting paraffinic and naphthenic type hydrocarbons (e.g., low-octane gasoline boiling range fractions) into petrochemical feedstocks and higher octane stocks suitable for blending into finished gasoline. Catalytic reforming is reported in two categories. They are:

Low Pressure. A processing unit operating at less than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

High Pressure. A processing unit operating at either equal to or greater than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

Charge Capacity. The input (feed) capacity of the refinery processing facilities.

Coal. A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time.

Commercial Kerosene-Type Jet Fuel. See *Kerosene-Type Jet Fuel*.

Conventional Blendstock for Oxygenate Blending (CBOB). See *Motor Gasoline Blending Components*.

Conventional Gasoline. See *Motor Gasoline (Finished)*.

Crude Oil. A mixture of hydrocarbons that exists in liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Depending upon the characteristics of the crude stream, it may also include:

Small amounts of hydrocarbons that exist in gaseous phase in natural underground reservoirs but are liquid at atmospheric pressure after being recovered from oil well (casinghead) gas in lease separators and are subsequently commingled

with the crude stream without being separately measured. Lease condensate recovered as a liquid from natural gas wells in lease or field separation facilities and later mixed into the crude stream is also included;

Small amounts of nonhydrocarbons produced from oil, such as sulfur and various metals;

Drip gases, and liquid hydrocarbons produced from tar sands, oil sands, gilsonite, and oil shale.

Liquids produced at natural gas processing plants are excluded. Crude oil is refined to produce a wide array of petroleum products, including heating oils; gasoline, diesel and jet fuels; lubricants; asphalt; ethane, propane, and butane; and many other products used for their energy or chemical content.

Crude oil is considered as either domestic or foreign, according to the following:

Domestic. Crude oil produced in the United States or from its Outer continental shelf as defined in 43 USC 1331.

Foreign. Crude oil produced outside the United States. Imported Athabasca hydrocarbons (tar sands from Canada) are included.

Crude Oil, Refinery Receipts. Receipts of domestic and foreign crude oil at a refinery. Includes all crude oil in transit except crude oil in transit by pipeline. Foreign crude oil is reported as a receipt only after entry through customs. Crude oil of foreign origin held in bonded storage is excluded.

Crude Oil Losses. Represents the volume of crude oil reported by petroleum refineries as being lost in their operations. These losses are due to spills, contamination, fires, etc. as opposed to refinery processing losses.

Crude Oil Production. The volume of crude oil produced from oil reservoirs during given periods of time. The amount of such production for a given period is measured as volumes delivered from lease storage tanks (i.e., the point of custody transfer) to pipelines, trucks, or other media for transport to refineries or terminals with adjustments for (1) net differences between opening and closing lease inventories, and (2) basic sediment and water (BS&W).

Crude Oil Qualities. Refers to two properties of crude oil, the sulfur content and API gravity, which affect processing complexity and product characteristics.

Delayed Coking. A process by which heavier crude oil fractions can be thermally decomposed under conditions of elevated temperatures and pressure to produce a mixture of lighter oils and petroleum coke. The light oils can be processed further in other refinery units to meet product specifications. The coke can be used either as a fuel or in other applications such as the manufacturing of steel or aluminum.

Desulfurization. The removal of sulfur, as from molten metals, petroleum oil, or flue gases. Petroleum desulfurization is a process that removes sulfur and its compounds from various streams during the refining process. Desulfurization processes include catalytic hydrotreating and other chemical/physical processes such

as adsorption. Desulfurization processes vary based on the type of stream treated (e.g., naphtha, distillate, heavy gas oil, etc.) and the amount of sulfur removed (e.g., sulfur reduction to 10 ppm). See *Catalytic Hydrotreating*.

Disposition. The components of petroleum disposition are stock change, crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

Distillate Fuel Oil. A general classification for one of the petroleum fractions produced in conventional distillation operations. It includes diesel fuels and fuel oils. Products known as No. 1, No. 2, and No. 4 diesel fuel are used in on-highway diesel engines, such as those in trucks and automobiles, as well as off-highway engines, such as those in railroad locomotives and agricultural machinery. Products known as No. 1, No. 2, and No. 4 fuel oils are used primarily for space heating and electric power generation.

No. 1 Distillate. A light petroleum distillate that can be used as either a diesel fuel or a fuel oil.

No. 1 Diesel Fuel. A light distillate fuel oil that has a distillation temperature of 550 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 975. It is used in high speed diesel engines generally operated under frequent speed and load changes, such as those in city buses and similar vehicles. See *No. 1 Distillate*.

No. 1 Fuel Oil. A light distillate fuel oil that has distillation temperatures of 400 degrees Fahrenheit at the 10-percent recovery point and 550 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 396. It is used primarily as fuel for portable outdoor stoves and portable outdoor heaters. See *No. 1 Distillate*.

No. 2 Distillate. A petroleum distillate that can be used as either a diesel fuel or a fuel oil.

No. 2 Diesel Fuel. A distillate fuel oil that has a distillation temperature of 640 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 975. It is used in high-speed diesel engines that are generally operated under uniform speed and load conditions, such as those in railroad locomotives, trucks, and automobiles. See *No. 2 Distillate*.

Low Sulfur No. 2 Diesel Fuel. No. 2 diesel fuel that has a sulfur level no higher than 0.05 percent by weight. It is used primarily in motor vehicle diesel engines for on-highway use.

High Sulfur No. 2 Diesel Fuel. No. 2 diesel fuel that has a sulfur level above 0.05 percent by weight.

No. 2 Fuel Oil (Heating Oil). A distillate fuel oil that has a distillation temperature of 640 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 396. It is used in

atomizing type burners for domestic heating or for moderate capacity commercial/industrial burner units. See **No. 2 Distillate**.

No. 4 Fuel. A distillate fuel oil made by blending distillate fuel oil and residual fuel oil stocks. It conforms to ASTM Specification D 396 or Federal Specification VV-F-815C and is used extensively in industrial plants and in commercial burner installations that are not equipped with preheating facilities. It also includes No. 4 diesel fuel used for low- and medium-speed diesel engines and conforms to ASTM Specification D 975.

No. 4 Diesel Fuel. See **No. 4 Fuel**.

No. 4 Fuel Oil. See **No. 4 Fuel**.

Electricity (Purchased). Electricity purchased for refinery operations that is not produced within the refinery complex.

Ending Stocks. Primary stocks of crude oil and petroleum products held in storage as of 12 midnight on the last day of the month. Primary stocks include crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tank farms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in-transit by water from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary Stocks exclude stocks of foreign origin that are held in bonded warehouse storage.

ETBE (Ethyl tertiary butyl ether) (CH₃)₃COC₂H₅. An oxygenate blend stock formed by the catalytic etherification of isobutylene with ethanol.

Ethane (C₂H₆). A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of - 127.48 degrees Fahrenheit. It is extracted from natural gas and refinery gas streams.

Ether. A generic term applied to a group of organic chemical compounds composed of carbon, hydrogen, and oxygen, characterized by an oxygen atom attached to two carbon atoms (e.g., methyl tertiary butyl ether).

Ethylene (C₂H₄). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes. Ethylene is used as a petrochemical feedstock for numerous chemical applications and the production of consumer goods.

Exports. Shipments of crude oil and petroleum products from the 50 States and the District of Columbia to foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Field Production. Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, new supply of other hydrocarbons/oxygenates and motor gasoline blending components, and fuel ethanol blended into finished motor gasoline.

Flexicoking. A thermal cracking process which converts heavy

hydrocarbons such as crude oil, tar sands bitumen, and distillation residues into light hydrocarbons. Feedstocks can be any pumpable hydrocarbons including those containing high concentrations of sulfur and metals.

Fluid Coking. A thermal cracking process utilizing the fluidized-solids technique to remove carbon (coke) for continuous conversion of heavy, low-grade oils into lighter products.

Fresh Feed Input. Represents input of material (crude oil, unfinished oils, natural gas liquids, other hydrocarbons and oxygenates or finished products) to processing units at a refinery that is being processed (input) into a particular unit for the first time.

Examples:

(1.) Unfinished oils coming out of a crude oil distillation unit which are input into a catalytic cracking unit are considered fresh feed to the catalytic cracking unit.

(2.) Unfinished oils coming out of a catalytic cracking unit being looped back into the same catalytic cracking unit to be reprocessed are not considered fresh feed.

Fuel Ethanol (C₂H₅OH). An anhydrous alcohol (ethanol with less than 1% water) intended for gasoline blending as described in Oxygenates definition.

Fuels Solvent Deasphalting. A refining process for removing asphalt compounds from petroleum fractions, such as reduced crude oil. The recovered stream from this process is used to produce fuel products.

Gas Oil. A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. It derives its name from having originally been used in the manufacture of illuminating gas. It is now used to produce distillate fuel oils and gasoline.

Gasohol. A blend of finished motor gasoline containing alcohol (generally ethanol but sometimes methanol) at a concentration of 10 percent or less by volume. Data on gasohol that has at least 2.7 percent oxygen, by weight, and is intended for sale inside carbon monoxide nonattainment areas are included in data on oxygenated gasoline. See **Oxygenates**.

Gasoline Blending Components. Naphthas which will be used for blending or compounding into finished aviation or motor gasoline (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

Gasoline Treated as Blendstock (GTAB). See **Motor Gasoline Blending Components**.

Gross Input to Atmospheric Crude Oil Distillation Units. Total input to atmospheric crude oil distillation units. Includes all crude oil, lease condensate, natural gas plant liquids, unfinished oils, liquefied refinery gases, slop oils, and other liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

Heavy Gas Oil. Petroleum distillates with an approximate boiling

range from 651 degrees Fahrenheit to 1000 degrees Fahrenheit.

High-Sulfur Distillate Fuel Oil. Distillate fuel oil having sulfur content greater than 500 ppm.

Hydrogen. The lightest of all gases, occurring chiefly in combination with oxygen in water; exists also in acids, bases, alcohols, petroleum, and other hydrocarbons.

Idle Capacity. The component of operable capacity that is not in operation and not under active repair, but capable of being placed in operation within 30 days; and capacity not in operation but under active repair that can be completed within 90 days.

Imported Crude Oil Burned As Fuel. The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. Imported crude oil burned as fuel includes lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

Imports. Receipts of crude oil and petroleum products into the 50 States and the District of Columbia from foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Isobutane (C_4H_{10}). A normally gaseous branch-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees Fahrenheit. It is extracted from natural gas or refinery gas streams.

Isobutylene (C_4H_8). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

Isohexane (C_6H_{14}). A saturated branch-chain hydrocarbon. It is a colorless liquid that boils at a temperature of 156.2 degrees Fahrenheit.

Isomerization. A refining process which alters the fundamental arrangement of atoms in the molecule without adding or removing anything from the original material. Used to convert normal butane into isobutane (C_4), an alkylation process feedstock, and normal pentane and hexane into isopentane (C_5) and isohexane (C_6), high-octane gasoline components.

Isopentane. See *Natural Gasoline and Isopentane*.

Kerosene. A light petroleum distillate that is used in space heaters, cook stoves, and water heaters and is suitable for use as a light source when burned in wick-fed lamps. Kerosene has a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point, a final boiling point of 572 degrees Fahrenheit, and a minimum flash point of 100 degrees Fahrenheit. Included are No. 1-K and No. 2-K, the two grades recognized by ASTM Specification D 3699 as well as all other grades of kerosene called range or stove oil, which have properties similar to those of No. 1 fuel oil. See *Kerosene-Type Jet Fuel*.

Kerosene-Type Jet Fuel. A kerosene-based product having a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point and a final maximum boiling point of 572 degrees Fahrenheit and meeting ASTM Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It is used for commercial and military turbojet and turboprop aircraft engines.

Commercial. Kerosene-type jet fuel intended for use in commercial aircraft.

Military. Kerosene-type jet fuel intended for use in military aircraft.

Lease Condensate. A mixture consisting primarily of pentanes and heavier hydrocarbons which is recovered as a liquid from natural gas in lease separation facilities. This category excludes natural gas liquids, such as butane and propane, which are recovered at downstream natural gas processing plants or facilities. See *Natural Gas Liquids*.

Light Gas Oils. Liquid Petroleum distillates heavier than naphtha, with an approximate boiling range from 401 degrees Fahrenheit to 650 degrees Fahrenheit.

Liquefied Petroleum Gases (LPG). A group of hydrocarbon-based gases derived from crude oil refining or natural gas fractionation. They include: ethane, ethylene, propane, propylene, normal butane, butylene, isobutane, and isobutylene. For convenience of transportation, these gases are liquefied through pressurization.

Liquefied Refinery Gases (LRG). Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration, they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene. Excludes still gas.

Low-Sulfur Distillate Fuel Oil. Distillate fuel oil having sulfur content greater than 15 ppm to 500 ppm. Low sulfur distillate fuel oil also includes product with sulfur content equal to or less than 15 ppm if the product is intended for pipeline shipment and the pipeline has a sulfur specification below 15 ppm.

Lubricants. Substances used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacture of other products, or used as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Lubricants include all grades of lubricating oils from spindle oil to cylinder oil and those used in greases.

Merchant Oxygenate Plants. Oxygenate production facilities that are not associated with a petroleum refinery. Production from these facilities is sold under contract or on the spot market to refiners or other gasoline blenders.

Methanol (CH_3OH). A light, volatile alcohol intended for gasoline blending as described in Oxygenate definition.

Middle Distillates. A general classification of refined petroleum products that includes distillate fuel oil and kerosene.

Military Kerosene-Type Jet Fuel. See *Kerosene-Type Jet Fuel*.

Miscellaneous Products. Includes all finished products not classified elsewhere (e.g., petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils). Note:

Beginning with January 2004 data, naphtha-type jet fuel is included in Miscellaneous Products.

Motor Gasoline (Finished). A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as defined in ASTM Specification D 4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122 to 158 degrees Fahrenheit at the 10 percent recovery point to 365 to 374 degrees Fahrenheit at the 90 percent recovery point. "Motor Gasoline" includes conventional gasoline; all types of oxygenated gasoline, including gasohol; and reformulated gasoline, but excludes aviation gasoline. Volumetric data on blending components, such as oxygenates, are not counted in data on finished motor gasoline until the blending components are blended into the gasoline. Note: E85 is included only in volumetric data on finished motor gasoline production and other components of product supplied.

Conventional Gasoline. Finished motor gasoline not included in the oxygenated or reformulated gasoline categories. Note: This category excludes reformulated gasoline blendstock for oxygenate blending (RBOB) as well as other blendstock.

Ed 55 and Lower. Finished conventional motor gasoline blended with a maximum of 55 volume percent denatured fuel ethanol.

Greater than Ed55. Finished conventional motor gasoline blended with denatured fuel ethanol where the volume percent of denatured fuel ethanol exceeds 55%.

OPRG. "Oxygenated Fuels Program Reformulated Gasoline" is reformulated gasoline which is intended for use in an oxygenated fuels program control area.

Oxygenated Gasoline (Including Gasohol). Oxygenated gasoline includes all finished motor gasoline, other than reformulated gasoline, having oxygen content of 2.0 percent or higher by weight. Gasohol containing a minimum 5.7 percent ethanol by volume is included in oxygenated gasoline. Oxygenated gasoline was reported as a separate product from January 1993 until December 2003 inclusive. Beginning with monthly data for January 2004, oxygenated gasoline is included in conventional gasoline. Historical data for oxygenated gasoline excluded Federal Oxygenated Program Reformulated Gasoline (OPRG). Historical oxygenated gasoline data also excluded other reformulated gasoline with a seasonal oxygen requirement regardless of season.

Reformulated Gasoline. Finished gasoline formulated for use in motor vehicles, the composition and properties of which meet the requirements of the reformulated gasoline regulations promulgated by the U.S. Environmental Protection Agency under Section 211(k) of the Clean Air Act. It includes gasoline produced to meet or exceed emissions performance and benzene content standards of federal-program reformulated gasoline even though the gasoline

may not meet all of the composition requirements (e.g., oxygen content) of federal-program reformulated gasoline. Note: This category includes Oxygenated Fuels Program Reformulated Gasoline (OPRG). Reformulated gasoline excludes Reformulated Blendstock for Oxygenate Blending (RBOB) and Gasoline Treated as Blendstock (GTAB).

Reformulated (Blended with Alcohol). Reformulated gasoline blended with an alcohol component (e.g., fuel ethanol) at a terminal or refinery to raise the oxygen content.

Reformulated (Blended with Ether). Reformulated gasoline blended with an ether component (e.g., methyl tertiary butyl ether) at a terminal or refinery to raise the oxygen content.

Reformulated (Non-Oxygenated). Reformulated gasoline without added ether or alcohol components.

Motor Gasoline Blending. Mechanical mixing of motor gasoline blending components, and oxygenates when required, to produce finished motor gasoline. Finished motor gasoline may be further mixed with other motor gasoline blending components or oxygenates, resulting in increased volumes of finished motor gasoline and/or changes in the formulation of finished motor gasoline (e.g., conventional motor gasoline mixed with MTBE to produce oxygenated motor gasoline).

Motor Gasoline Blending Components. Naphthas (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) used for blending or compounding into finished motor gasoline. These components include reformulated gasoline blendstock for oxygenate blending (RBOB) but exclude oxygenates (alcohols, ethers), butane, and pentanes plus. Note: Oxygenates are reported as individual components and are included in the total for other hydrocarbons, hydrogens, and oxygenates.

Conventional Blendstock for Oxygenate Blending (CBOB). Conventional gasoline blendstock intended for blending with oxygenates downstream of the refinery where it was produced. CBOB must become conventional gasoline after blending with oxygenates. Motor gasoline blending components that require blending other than with oxygenates to become finished conventional gasoline are reported as All Other Motor Gasoline Blending Components. Excludes reformulated blendstock for oxygenate blending (RBOB).

Gasoline Treated as Blendstock (GTAB). Non-certified Foreign Refinery gasoline classified by an importer as blendstock to be either blended or reclassified with respect to reformulated or conventional gasoline. GTAB was classified on EIA surveys as either reformulated or conventional based on emissions performance and the intended end use in data through the end of December 2009. Designation of GTAB as reformulated or conventional was discontinued beginning with data for January 2010. GTAB was reported as a single product beginning with data for January 2010. GTAB data for January 2010 and later months is presented as conventional

motor gasoline blending components when reported as a subset of motor gasoline blending components.

Reformulated Blendstock for Oxygenate Blending (RBOB). Specially produced reformulated gasoline blendstock intended for blending with oxygenates downstream of the refinery where it was produced. Includes RBOB used to meet requirements of the Federal reformulated gasoline program and other blendstock intended for blending with oxygenates to produce finished gasoline that meets or exceeds emissions performance requirements of Federal reformulated gasoline (e.g., California RBOB and Arizona RBOB). Excludes conventional gasoline blendstocks for oxygenate blending (CBOB).

RBOB for Blending with Alcohol. Motor gasoline blending components intended to be blended with an alcohol component (e.g., fuel ethanol) at a terminal or refinery to raise the oxygen content. RBOB product detail by type of oxygenate was discontinued effective with data for January 2010. Beginning with data for January 2010, RBOB was reported as a single product.

RBOB for Blending with Ether. Motor gasoline blending components intended to be blended with an ether component (e.g., methyl tertiary butyl ether) at a terminal or refinery to raise the oxygen content. RBOB product detail by type of oxygenate was discontinued effective with data for January 2010. Beginning with data for January 2010, RBOB was reported as a single product.

All Other Motor Gasoline Blending Components. Naphthas (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) used for blending or compounding into finished motor gasoline. Includes receipts and inputs of Gasoline Treated as Blendstock (GTAB). Excludes conventional blendstock for oxygenate blending (CBOB), reformulated blendstock for oxygenate blending, oxygenates (e.g. fuel ethanol and methyl tertiary butyl ether), butane, and pentanes plus.

MTBE (Methyl tertiary butyl ether) $(CH_3)_3COCH_3$. An ether intended for gasoline blending as described in Oxygenate definition.

Naphtha. A generic term applied to a petroleum fraction with an approximate boiling range between 122 degrees Fahrenheit and 400 degrees Fahrenheit.

Naphtha Less Than 401° F. See *Petrochemical Feedstocks*.

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range having an average gravity of 52.8 degrees API, 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees Fahrenheit, and meeting Military Specification MIL-T-5624L (Grade JP-4). It is used primarily for military turbojet and turboprop aircraft engines because it has a lower freeze point than other aviation fuels and meets engine requirements at high altitudes and speeds. Note: Beginning with January 2004 data, naphtha-type jet fuel is included in *Miscellaneous Products*.

Natural Gas. A gaseous mixture of hydrocarbon compounds, the primary one being **methane**.

Natural Gas Field Facility. A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, normal butane, pentanes plus, etc., and to control the quality of natural gas to be marketed.

Natural Gas Liquids. Those hydrocarbons in natural gas that are separated from the gas as liquids through the process of absorption, condensation, adsorption, or other methods in gas processing or cycling plants. Generally such liquids consist of propane and heavier hydrocarbons and are commonly referred to as lease condensate, natural gasoline, and liquefied petroleum gases. Natural gas liquids include natural gas plant liquids (primarily ethane, propane, butane, and isobutane; see *Natural Gas Plant Liquids*) and lease condensate (primarily pentanes produced from natural gas at lease separators and field facilities; see *Lease Condensate*).

Natural Gas Plant Liquids. Those hydrocarbons in natural gas that are separated as liquids at natural gas processing plants, fractionating and cycling plants, and, in some instances, field facilities. Lease condensate is excluded. Products obtained include ethane; liquefied petroleum gases (propane, butanes, propane-butane mixtures, ethane-propane mixtures); isopentane; and other small quantities of finished products, such as motor gasoline, special naphthas, jet fuel, kerosene, and distillate fuel oil.

Natural Gas Processing Plant. Facilities designed to recover natural gas liquids from a stream of natural gas that may or may not have passed through lease separators and/or field separation facilities. These facilities control the quality of the natural gas to be marketed. Cycling plants are classified as gas processing plants.

Natural Gasoline and Isopentane. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, (C_5H_{12}) , obtained by fractionation of natural gasoline or isomerization of normal pentane.

Net Receipts. The difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge.

Normal Butane. See *Butane*.

OPEC. An intergovernmental organization whose stated objective is to coordinate and unify petroleum policies of member countries. It was created at the Baghdad Conference on September 10–14, 1960. Current and former members (with years of membership) include Algeria (1969-present), Angola (2007-present), Congo (Brazzaville) (June 2018-present), Ecuador (1973-1992 and 2007-present), Gabon (1975-1994 and July, 2016-present), Indonesia (1962-2008 and January, 2016-November, 2016), Iran (1960-present), Iraq (1960-present), Kuwait (1960-present), Libya (1962-present), Nigeria (1971-present), Qatar (1961-2018), Saudi Arabia (1960-present), United Arab Emirates (1967-present), and Venezuela (1960-present).

Operable Capacity. The amount of capacity that, at the beginning of the period, is in operation; not in operation and not under active repair, but capable of being placed in operation within 30 days; or not in operation but under active repair that can be completed within 90 days. Operable capacity is the sum of the operating and idle capacity and is measured in barrels per calendar day or barrels per stream day.

Operable Utilization Rate. Represents the utilization of the atmospheric crude oil distillation units. The rate is calculated by dividing the gross input to these units by the operable refining capacity of the units.

Operating Capacity. The component of operable capacity that is in operation at the beginning of the period.

Operating Utilization Rate. Represents the utilization of the atmospheric crude oil distillation units. The rate is calculated by dividing the gross input to these units by the operating refining capacity of the units.

Other Hydrocarbons. Materials received by a refinery and consumed as a raw material. Includes hydrogen, coal tar derivatives and gilsonite. Excludes natural gas used for fuel or hydrogen feedstock.

Other Oils Equal To or Greater Than 401° F. See *Petrochemical Feedstocks*.

Other Oxygenates. Other aliphatic alcohols and aliphatic ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

Oxygenated Gasoline. See *Motor Gasoline (Finished)*.

Oxygenates. Substances which, when added to gasoline, increase the amount of oxygen in that gasoline blend. Fuel Ethanol, Methyl Tertiary Butyl Ether (MTBE), Ethyl Tertiary Butyl Ether (ETBE), and methanol are common oxygenates.

Fuel Ethanol. Blends of up to 10 percent by volume anhydrous ethanol (200 proof) (commonly referred to as the “gasohol waiver”).

Methanol. Blends of methanol and gasoline-grade tertiary butyl alcohol (GTBA) such that the total oxygen content does not exceed 3.5 percent by weight and the ratio of methanol to GTBA is less than or equal to 1. It is also specified that this blended fuel must meet ASTM volatility specifications (commonly referred to as the “ARCO” waiver).

Blends of up to 5.0 percent by volume methanol with a minimum of 2.5 percent by volume cosolvent alcohols having a carbon number of 4 or less (i.e., ethanol, propanol, butanol, and/or GTBA). The total oxygen must not exceed 3.7 percent by weight, and the blend must meet ASTM volatility specifications as well as phase separation and alcohol purity specifications (commonly referred to as the “DuPont” waiver).

MTBE (Methyl tertiary butyl ether). Blends up to 15.0 percent by volume MTBE which must meet the ASTM D4814 specifications. Blenders must take precautions that

the blends are not used as base gasolines for other oxygenated blends (commonly referred to as the “Sun” waiver).

Pentanes Plus. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

Persian Gulf. The countries that comprise the Persian Gulf are: Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates.

Petrochemical Feedstocks. Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are “Naphtha Less Than 401° F” and “Other Oils Equal To or Greater Than 401° F.”

Naphtha Less Than 401° F. A naphtha with a boiling range of less than 401 degrees Fahrenheit that is intended for use as a petrochemical feedstock.

Other Oils Equal To or Greater Than 401° F. Oils with a boiling range equal to or greater than 401 degrees Fahrenheit that are intended for use as a petrochemical feedstock.

Petroleum Administration for Defense (PAD) Districts. Geographic aggregations of the 50 States and the District of Columbia into five districts by the Petroleum Administration for Defense in 1950. These districts were originally defined during World War II for purposes of administering oil allocation.

Petroleum Coke. A residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion is 5 barrels (of 42 U.S. gallons each) per short ton. Coke from petroleum has a heating value of 6.024 million Btu per barrel.

Catalyst Coke. In many catalytic operations (e.g., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refining process. This carbon or coke is not recoverable in a concentrated form.

Marketable Coke. Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This “green” coke may be sold as is or further purified by calcining.

Petroleum Products. Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Pipeline (Petroleum). Crude oil and product pipelines used to transport crude oil and petroleum products respectively, (including interstate, intrastate, and intracompany pipelines) within the 50 States and the District of Columbia.

Plant Condensate. One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Processing Gain. The volumetric amount by which total output is greater than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a lower specific gravity than the crude oil processed.

Processing Loss. The volumetric amount by which total refinery output is less than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a higher specific gravity than the crude oil processed.

Product Supplied, Crude Oil. Crude oil burned on leases and by pipelines as fuel.

Production Capacity. The maximum amount of product that can be produced from processing facilities.

Products Supplied. Approximately represents consumption of petroleum products because it measures the disappearance of these products from primary sources, i.e., refineries, natural gas processing plants, blending plants, pipelines, and bulk terminals. In general, product supplied of each product in any given period is computed as follows: field production, plus refinery production, plus imports, plus unaccounted for crude oil, (plus net receipts when calculated on a PAD District basis), minus stock change, minus crude oil losses, minus refinery inputs, minus exports.

Propane (C_3H_8). A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of - 43.67 degrees Fahrenheit. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

Propylene (C_3H_6). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

Propylene (C_3H_6) (nonfuel use). Propylene that is intended for use in nonfuel applications such as petrochemical manufacturing. Nonfuel use propylene includes chemical-grade propylene, polymer-grade propylene, and trace amounts of propane. Nonfuel use propylene also includes the propylene component of propane/propylene mixes where the propylene will be separated from the mix in a propane/propylene splitting process. Excluded is the propylene component of propane/propylene mixes where the propylene component of the mix is intended for sale into the fuel market.

Refinery. An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and oxygenates.

Refinery-Grade Butane. See *Butane*.

Refinery Input, Crude Oil. Total crude oil (domestic plus foreign) input to crude oil distillation units and other refinery processing units (cokers, etc.).

Refinery Input, Total. The raw materials and intermediate materials processed at refineries to produce finished petroleum products. They include crude oil, products of natural gas processing plants, unfinished oils, other hydrocarbons and oxygenates, motor gasoline and aviation gasoline blending components and finished petroleum products.

Refinery Production. Petroleum products produced at a refinery or blending plant. Published production of these products equals refinery production minus refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. Refinery production of unfinished oils, and motor and aviation gasoline blending components appear on a net basis under refinery input.

Refinery Yield. Refinery yield (expressed as a percentage) represents the percent of finished product produced from input of crude oil and net input of unfinished oils. It is calculated by dividing the sum of crude oil and net unfinished input into the individual net production of finished products. Before calculating the yield for finished motor gasoline, the input of natural gas liquids, other hydrocarbons and oxygenates, and net input of motor gasoline blending components must be subtracted from the net production of finished motor gasoline. Before calculating the yield for finished aviation gasoline, input of aviation gasoline blending components must be subtracted from the net production of finished aviation gasoline.

Reformulated Blendstock for Oxygenate Blending (RBOB). See *Motor Gasoline Blending Components*.

Reformulated Gasoline. See *Motor Gasoline (Finished)*.

Renewable Fuels (Other). Fuels and fuel blending components, except biomass-based diesel fuel, renewable diesel fuel, and fuel ethanol, produced from renewable biomass.

Residual Fuel Oil. A general classification for the heavier oils, known as No. 5 and No. 6 fuel oils, that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations. It conforms to ASTM Specifications D 396 and D 975 and Federal Specification VV-F-815C. No. 5, a residual fuel oil of medium viscosity, is also known as Navy Special and is defined in Military Specification MIL-F-859E, including Amendment 2 (NATO Symbol F-770). It is used in steam-powered vessels in government service and inshore power plants. No. 6 fuel oil includes Bunker C fuel oil and is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes.

Residuum. Residue from crude oil after distilling off all but the heaviest components, with a boiling range greater than 1000 degrees Fahrenheit.

Road Oil. Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades from 0, the most liquid, to 5, the most viscous.

Shell Storage Capacity. The design capacity of a petroleum storage tank which is always greater than or equal to working storage capacity. Special Naphthas. All finished products within the naphtha boiling range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specification D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

Steam (Purchased). Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

Still Gas (Refinery Gas). Any form or mixture of gases produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. Still gas is used as a refinery fuel and a petrochemical feedstock. The conversion factor is 6 million BTU's per fuel oil equivalent barrel.

Stock Change. The difference between stocks at the beginning of the reporting period and stocks at the end of the reporting period. Note: A negative number indicates a decrease (i.e., a drawdown) in stocks and a positive number indicates an increase (i.e., a buildup) in stocks during the reporting period.

Strategic Petroleum Reserve (SPR). Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

Sulfur. A yellowish nonmetallic element, sometimes known as "brimstone." It is present at various levels of concentration in many fossil fuels whose combustion releases sulfur compounds that are considered harmful to the environment. Some of the most commonly used fossil fuels are categorized according to their sulfur content, with lower sulfur fuels usually selling at a higher price. Note: No. 2 Distillate fuel is currently reported as having either a 0.05 percent or lower sulfur level for on-highway vehicle use or a greater than 0.05 percent sulfur level for off-highway use, home heating oil, and commercial and industrial uses. Residual fuel, regardless of use, is classified as having either no more than 1 percent sulfur or greater than 1 percent sulfur. Coal is also classified as being low-sulfur at concentrations of 1 percent or less or high-sulfur at concentrations greater than 1 percent.

Supply. The components of petroleum supply are field production, refinery production, imports, and net receipts when calculated on a PAD District basis.

TAME (Tertiary amyl methyl ether) $(CH_3)_2(C_2H_5)COCH_3$. An oxygenate blend stock formed by the catalytic etherification of isoamylene with methanol.

Tank Farm. An installation used by gathering and trunk pipeline companies, crude oil producers, and terminal operators (except refineries) to store crude oil.

Tanker and Barge. Vessels that transport crude oil or petroleum products. Data are reported for movements between PAD Districts; from a PAD District to the Panama Canal; or from the Panama Canal

to a PAD District.

TBA (Tertiary butyl alcohol) $(CH_3)_3COH$. An alcohol primarily used as a chemical feedstock, a solvent or feedstock for isobutylene production for MTBE; produced as a co-product of propylene oxide production or by direct hydration of isobutylene.

Thermal Cracking. A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking includes gas oil, visbreaking, fluid coking, delayed coking, and other thermal cracking processes (e.g., flexicoking). See individual categories for definition.

Toluene $(C_6H_5CH_3)$. Colorless liquid of the aromatic group of petroleum hydrocarbons, made by the catalytic reforming of petroleum naphthas containing methyl cyclohexane. A high-octane gasoline-blending agent, solvent, and chemical intermediate, base for TNT.

Ultra-Low Sulfur Distillate Fuel Oil. Distillate fuel oil having sulfur content of 15 ppm or lower. Ultra-low sulfur distillate fuel oil that will be shipped by pipeline must satisfy the sulfur specification of the shipping pipeline if the pipeline specification is below 15 ppm. Distillate fuel oil intended for pipeline shipment that fails to meet a pipeline sulfur specification that is below 15 ppm will be classified as low-sulfur distillate fuel oil.

Unaccounted for Crude Oil. Represents the arithmetic difference between the calculated supply and the calculated disposition of crude oil. The calculated supply is the sum of crude oil production plus imports minus changes in crude oil stocks. The calculated disposition of crude oil is the sum of crude oil input to refineries, crude oil exports, crude oil burned as fuel, and crude oil losses.

Unfinished Oils. All oils requiring further processing, except those requiring only mechanical blending. Unfinished oils are produced by partial refining of crude oil and include naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.

Unfractionated Streams. Mixtures of unsegregated natural gas liquid components excluding those in plant condensate. This product is extracted from natural gas.

United States. The United States is defined as the 50 States and the District of Columbia.

Vacuum Distillation. Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique with its relatively low temperatures prevents cracking or decomposition of the charge stock.

Visbreaking. A thermal cracking process in which heavy atmospheric or vacuum-still bottoms are cracked at moderate temperatures to increase production of distillate products and reduce viscosity of the distillation residues.

Wax. A solid or semi-solid material at 77 degrees Fahrenheit consisting of a mixture of hydrocarbons obtained or derived from petroleum fractions, or through a Fischer-Tropsch type process, in which the straight-chained paraffin series predominates. This includes all marketable wax, whether crude or refined, with a congealing point

(ASTM D 938) between 80 (or 85) and 240 degrees Fahrenheit and a maximum oil content (ASTM D 3235) of 50 weight percent.

Working Storage Capacity. The difference in volume between the maximum safe fill capacity and the quantity below which pump suction is ineffective (bottoms).

Xylene ($C_6H_4(CH_3)_2$). Colorless liquid of the aromatic group of hydrocarbons made the catalytic reforming of certain naphthenic petroleum fractions. Used as high-octane motor and aviation gasoline blending agents, solvents, chemical intermediates. Isomers are metaxylene, orthoxylene, paraxylene.